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*Training Readiness in
the Army Reserve
Components*

*Ronald E. Sortor, Thomas F. Lippiatt,
J. Michael Polich, James C. Crowley*

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PREFACE

This report documents RAND research on the training readiness of high-priority Army reserve component (RC) units. It describes training enhancement activities and performance levels of units participating in the Army's Bold Shift program in 1992 and assesses the status of the units at the end of their 1992 annual training period. Because Bold Shift was only in its first year in 1992, it is far too early to provide a definitive assessment of its ultimate effects. The analysis here seeks to provide insights into broader and in some cases more fundamental training readiness issues.

Bold Shift had a twofold purpose. It was intended to improve the readiness of the active and reserve components and thereby enhance the Army's ability to meet the nation's changing military requirements with a reduced active force structure. A second explicit purpose was to improve relationships between the active and reserve components.

The Army asked RAND to assist in assessing the Bold Shift program and the contributions that such programs may offer for future RC readiness. This document describes key training enhancements and achievements at annual training and the personnel and leadership conditions in participating units. The analyses develop an overall picture of the operation of the Bold Shift units in 1992 and illuminate the factors affecting their training readiness.

This research was carried out under a RAND project entitled "Reserve Component Peacetime and Post-Mobilization Training," sponsored by the Commanding General, U.S. Army Forces Com-

mand, and conducted within the Arroyo Center's Manpower and Training Program.

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SUMMARY

By most if not all measures, Operation Desert Shield (ODS) was a very demanding and successful military deployment. The operation challenged U.S. forces, both active and reserve, and it occasioned the first call-up of reserve component (RC) units in more than 20 years. Generally speaking, the system performed well. But the demands of future conflicts may exceed those posed by ODS, and the United States may be less well situated to meet them.

In light of future requirements and the ODS experience, the Army and other agencies undertook a number of efforts to examine the need for readiness improvements in the Army's reserve components. During 1992 these efforts culminated in an extensive pilot program called "Bold Shift." This program involved collaborative efforts by the active Army, the National Guard, and the U.S. Army Reserve to enhance the readiness of selected high-priority units that may be needed quickly in future crises. This report analyzes the activities and performance of units that participated in Bold Shift during 1992.¹ It seeks to understand the units' training achievements and shortfalls, to identify key factors underlying training readiness, and to suggest potential improvements.

The initial implementation of Bold Shift was very successful in many dimensions. The main features of the program—training to more realistically attainable pre-mobilization goals, new concepts for field training, and closer ties between the active and reserve compo-

¹The units were predominantly National Guard combat brigades but also included some nondivisional combat support (CS) and combat service support (CSS) units.

nents—seemed to be moving in the right direction and well worth continuing. A large majority of unit members we surveyed regarded Bold Shift as effective in improving the readiness of their unit for its wartime mission. The vast majority felt that the program should be continued, and, with only slightly less unanimity, believed that the program should be expanded to other RC units.

While successful in concept and features, the program has not been able to bring most pilot units to their pre-mobilization training and readiness goals.² Results suggest that the pre-mobilization goals for CS and CSS units may be attainable if continued improvements can be made. For combat units, the results appear less optimistic. In all cases personnel readiness—having sufficient trained and deployable personnel—is a challenge.

Below we summarize these and other issues under five major areas: unit training and annual training (AT), personnel readiness, leader training, and monthly drill training.

UNIT TRAINING AND ANNUAL TRAINING

To enhance the training status and collective skills of RC units, the Army adopted significant changes in the way RC units train. First, the Army focused training on lower-echelon levels. For example, training in combat units was to be concentrated on crew gunnery and platoon maneuver, rather than attempting to master higher-echelon tasks as had been the goal before ODS. To accomplish its new goals, the Army adopted a methodology called the Reserve Training Concept (RTC), requiring considerable active component (AC) support for RC units. A “like-type” AC unit was named as the sponsor for each RC unit; the sponsor helped plan, execute, and evaluate the RC unit’s training.

The training focus and concepts tested under Bold Shift, although controversial when proposed, were overwhelmingly accepted by both the RC and the AC. Survey results showed that almost 75 percent of RC unit leaders participating in Bold Shift thought that AT

²The primary goals were (a) crew and squad gunnery qualification, (b) combat platoons proficient on maneuver tasks, and (c) CS and CSS units proficient at company level.

during 1992 was very effective and better than training they had experienced in previous years.

Similarly, the involvement of active units with the training of their counterpart RC units was readily accepted. Again, 75 percent of RC unit leaders found the AC support to their AT to be either extremely or very effective. Although this did result in some diversion of active duty soldiers (and especially leaders) from their own training, by and large the dollar costs were not large and the program was compatible with maintaining AC readiness (provided that each AC sponsor supported only a single like-type RC unit).

Nevertheless, Bold Shift did not bring the pilot units to their pre-mobilization training and readiness goals. About one-third of the CS and CSS units attained their pre-mobilization goals. The results for combat units appear less optimistic. All the maneuver brigades fell short of their goals; for example, less than 30 percent of the authorized number of crews qualified on Table VIII, and a smaller number executed maneuver training lanes at the echelon level that was expected.³ Most brigades had to choose, with limited time, between focusing on gunnery and maneuver or sending individuals to school for Military Occupational Specialty (MOS) qualification and other individual training. There was simply not enough time in their schedules to practice all of the tasks they were expected to master.

One of the toughest challenges is ensuring participation in AT by a large number of individuals and by all the members of each crew. In 1992, only 60 to 70 percent of members attended AT with their unit; many of the remainder were attending prescribed individual training courses. The need for such courses is in turn driven by low rates of duty MOS qualification and by required professional education for noncommissioned officers (NCOs) who have been promoted, or may be promoted, to a higher-grade position.

³Only half of the tank and infantry platoons conducted any maneuver training. Also, that training covered a very limited set of tasks and was frequently conducted at a lower echelon than expected (e.g., section instead of platoon operations).

PERSONNEL READINESS

We have noted repeatedly that shortfalls in personnel readiness—especially the lack of MOS qualification—constitute a fundamental problem, taking soldiers away from their unit and impeding collective training. It is clear that the primary cause of qualification problems is the high attrition and turbulence in RC units. Other factors that contribute include (1) the inability of most units to recruit to their authorized strength, (2) units' difficulty in filling open positions with qualified personnel, and (3) difficulties in getting personnel to the required schools.

No one policy is likely to solve the problems outlined here. During 1992 units were urged to send personnel to school for required training and were authorized additional slots above the required strength level (to provide slack for those needing MOS training). While some of these initiatives have had only a short time to exert their effects, so far they have not increased MOS qualification levels or brought units to full strength. We suggest two additional options that warrant further examination and, possibly, some experimentation. One would develop incentives and policies to encourage individuals to remain in their unit and in their job. The second would recognize that some cross-leveling will be required after a unit is mobilized and would plan for it.

LEADER TRAINING

It has long been recognized that the RC faces high hurdles in developing leaders and maintaining their skills, given the limited time available for training. The heavy administrative demands of running an RC unit tend to leave little time for practicing leadership skills in field or tactical situations.

Our data show that problems remain with leader qualification levels. There is a significant backlog of leaders who require training for their duty MOS (10 percent or more of platoon sergeants, leaders, and squad leaders). Others need professional education to be fully qualified for the positions they hold. For example, 37 percent of E5s still need to take the Primary Leadership Development Course (PLDC); 39 percent of E6s need to take the Basic NCO Course (BNCOC); and 29 percent of E7s need to complete the Advanced NCO Course

(ANCOC). Half of company commanders have not been to the Officer Advanced Course (OAC), nor have most battalion commanders attended the pre-command course. This is in contrast to the AC, where virtually all leaders in these positions have this training.

MONTHLY DRILL TRAINING

Monthly drills, called inactive duty for training (IDT), represent 24 of the 38 or 39 training days available to an RC unit. Survey results indicate that RC personnel did not think IDT was as effective as AT in preparing the unit for its wartime mission. Of the unit members' top six choices for improving the effectiveness of IDT, three reflected the perceived need for better planning and more effective execution of weekend drills. This need for more efficient use of a scarce commodity—the RC member's time—is a continuous thread running through our observations of IDT and other facets of RC training.

One way of helping the unit be more time-efficient would be to add full-time support personnel. By carrying out administrative tasks that would otherwise divert the commander and other leaders from training, and by preparing for IDT weekends in advance, full-time support personnel play a role that unit leaders regard as essential.

Another way of improving the effectiveness of IDT would be to fund additional time for leader preparation before the IDT period. Additional enhancements could include improving local access to equipment, ranges, and training sites. Other possible solutions, such as more local training areas or providing air transport to move individuals to training areas, although potentially costly, would permit a unit to train more effectively without having to spend an inordinate amount of the limited weekend time traveling to a remote site.

FUTURE EXPECTATIONS

Overall, future programs need to bear in mind two features of reserve experience: the need for *stability* in personnel and *efficiency* in use of soldiers' time. We have been struck repeatedly by how heavy a burden the current reserve system places on the acquisition and sustainment of difficult soldier skills. Given the basic features of reserve service—modest amounts of training time, split into infrequent

training periods—there is every opportunity for skills to atrophy and changes in personnel to disrupt relationships that are essential to collective proficiency and unit cohesion. To overcome these challenges, the reserve forces need an environment of more stability and more efficiency to allow individual skills to mature and groups of individuals to grow into capable fighting forces.

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This report benefited from the support and help of many people in the Army and at RAND. It could not have been prepared without the considerable input and assistance from the staff at Forces Command Headquarters (FORSCOM), the National Guard Bureau, and the U.S. Army Reserve Command (USARC). We owe particular thanks to General Edwin Burba, Commander in Chief, FORSCOM and to the staff of the Bold Shift Task force at FORSCOM. In one way or another, all provided access to information and the ability to observe operations and training events during the first year of Bold Shift, forming the basis for the analyses in this report.

At RAND, we received many helpful comments and reviews from John Winkler, David Oaks, and Paul Steinberg. The content and conclusions, however, remain the sole responsibility of the authors.

GLOSSARY

AAR	After Action Review
AC	Active Component
ADT	Additional Duty for Training
AGR	Active Guard and Reserve
ARTEP	Army Training and Evaluation Program
AT	Annual Training
ANCOC	Advanced NCO Course
ARNG	Army National Guard
BNCOC	Basic NCO Course
CAS3	Combined Arms and Service Staff School
CC	Constructive Credit
CFP	Contingency Force Pool
CGSOC	Command and General Staff Officer Course
CONUSA	Continental U.S. Army
CS	Combat Support
CSS	Combat Service Support
DAIG	Department of the Army Inspector General
EAD	Echelons Above Division
EAC	Echelons Above Corps
FORSCOM	Forces Command
FTS	Full-Time Support
GAO	Government Accounting Office
IDT	Inactive Duty Training
IET	Initial Entry Training
METL	Mission Essential Task List
METT-T	Mission, Enemy, Terrain, Troops, Time available
MOS	Military Occupational Specialty
MOSQ	Military Occupational Specialty Qualification

MUSARC	Major U.S. Army Reserve Command
NCO	Noncommissioned Officer
NCOES	NCO Education System
NET	New Equipment Training
NGB	National Guard Bureau
NTC	National Training Center
OAC	Officer Advanced Course
OBC	Officer Basic Course
OC	Observer-Controller
ODS	Operation Desert Shield/Storm
OES	Officer Education System
O&M	Operations and Maintenance
OMA	Operations and Maintenance, Army
OMAR	Operations and Maintenance, Army Reserve
ORE	Operational Readiness Evaluation
PLDC	Primary Leadership Development Course
RC	Reserve Component
RO	Round-Out
RTC	Reserve Training Concept
RU	Round-Up
STX	Situational Training Exercise
TAG	The Adjutant General
TAM	Training Assessment Model
TCDC	Tactical Command Development Course
TOE	Table of Organization and Equipment
TRADOC	Training and Doctrine Command
ULBSC	Unit Leader Battle Skills Course
USAR	U.S. Army Reserve
USR	Unit Status Report

Chapter One

INTRODUCTION

The readiness of U.S. reserve forces has long been a concern for military planners, one that is likely to intensify as the active-duty force shrinks. At the time of the Persian Gulf War, the Army force structure consisted of about 770,000 soldiers in the active component (AC) and 776,000 in the reserve components (RC). By most measures, it was a robust, well-trained, and modern force built to fight a global war with the Soviet Union. However, current plans call for the active force structure to decrease to less than 500,000 and the RC to decline to 575,000. Budget pressures may push these figures still lower. At the same time, the Army must be prepared for regional conflicts that may require it to deploy large numbers of units—both active and reserve—on short notice. These conditions imply that the Army could become even more dependent on ready RC units.

The Gulf War, beginning with Operation Desert Shield (ODS), occasioned the first call-up of reserve units in more than two decades. Although RC performance during the war received generally favorable ratings, RC units did encounter some readiness problems and delays in the mobilization process. One result was the Army's decision to launch a major new program, called "Bold Shift," in an attempt to enhance the readiness of high-priority units that may be needed quickly in future crises.

This report analyzes the activities and performance of units that participated in Bold Shift during 1992. It seeks to understand the units' training achievements and shortfalls, to identify key factors underlying training readiness, and to suggest potential improvements.

OPERATION DESERT SHIELD EXPERIENCE

The call-up of reserve forces for ODS enabled the Army to witness the RC's effectiveness in action. While we lack specific quantitative data on RC unit performance in ODS, Army leaders generally agreed that RC support units were effective. By all accounts, the support units mobilized and deployed expeditiously and performed their missions satisfactorily.¹ However, the Army recognized areas that would need improvement if these units were to be ready to meet future needs. For example, personnel readiness—the presence of sufficient soldiers and leaders trained for their duty positions and legally deployable to a wartime theater—had been a problem in some units during ODS, as evidenced by the cross-leveling of personnel at call-up (General Accounting Office, 1992a).

The most visible and publicized need for RC improvement was the training readiness of the combat brigades, which were integral parts of later-deploying active divisions. These units were called “round-out brigades.”² Two National Guard brigades were programmed to round out the 1st Cavalry and 24th Infantry Divisions, respectively, but the round-out structure was not used during ODS. Instead, active component (AC) brigades, which the Army deemed more ready and available, were attached and deployed as the third brigade of these divisions.³

However, as a precaution three National Guard combat brigades were mobilized in November 1990. The training period for these three brigades was over 90 days. This seemed long to many who had presumed that the Guard brigades had been trained to the point where they could deploy with or shortly after their active counter-

¹Support units include functions such as artillery, transportation, medical, engineering, and military police. See Lippiatt et al. (1992a) for a discussion of ODS experience with Army support units.

²A doctrinal combat division in the U.S. Army has three maneuver brigades. Divisions rounded out by reserve brigades have two AC brigades and one RC brigade.

³See GAO (1992b) for a discussion of the relative readiness of the RC round-out brigades and the replacement AC brigades. Also, see Sortor, Lippiatt, and Polich (1993) for a discussion of the timing and considerations for selecting units for call-up.

parts.⁴ Consequently, the Army undertook a searching review of possible training improvements for high-priority RC units.

ARMY INITIATIVES TO ENHANCE TRAINING READINESS

Based on the ODS experience, a number of Army groups examined the mobilization and train-up process and sought to identify areas that required change. Several different efforts—by the Department of the Army Inspector General (DAIG), the General Accounting Office (GAO), and the Army's Round-Out Brigade Task Force—concluded that changes were needed if the round-out brigades were to be ready to meet future needs. Each provided recommendations for specific actions, concentrated in four major areas: unit training, personnel readiness, leader development, and readiness assessment.

Following up on these recommendations, U.S. Army Forces Command (FORSCOM) formed a special staff group in 1991 to develop initiatives that first, would improve the readiness of round-out and round-up brigades and second, could expand to the rest of the RC.⁵ Named Bold Shift, this set of initiatives was approved by the Army Chief of Staff in the fall of 1991 (CSA, 1991).

To implement Bold Shift, the Army chose a few initiatives with high-payoff potential, developed them quickly, and began executing them as a pilot program in selected units in 1992. The units participating in the program consisted of both combat and support formations. The combat units included all elements of seven Army National Guard (ARNG) round-out and round-up brigades.⁶ Altogether, these brigade elements included 192 company-sized units. All these brigades received training support and evaluation assistance from

⁴For a discussion of the mobilization and train-up of the round-out brigades, see Lippiatt, Polich, and Sortor (1992b).

⁵Round-up brigades are similar to round-out brigades. They are associated with an AC division, but are not an integral part of the division; rather, they are a fourth brigade that can operate separately or with the division depending on the tactical circumstances.

⁶The brigades included the 27th Infantry Brigade, New York; 48th Infantry Brigade, Georgia; 81st Infantry Brigade, Washington; 116th Armored Brigade, Idaho/Oregon/Utah; 155th Armored Brigade, Mississippi; 218th Infantry Brigade, South Carolina; and the 256th Infantry Brigade, Louisiana.

their "sponsor" active units (normally, elements of an AC division). In addition, Bold Shift incorporated 82 nondivisional support elements from the ARNG and the U.S. Army Reserve (USAR). These included transportation, engineer, artillery, medical, chemical, and other support units, almost all of which were company-sized.⁷ Thus, 274 company-sized units participated in the 1992 program. The resulting mix of ARNG and USAR units came from all regions of the country and represented a wide range of armor, infantry, field artillery, and support units.

OBJECTIVE AND SCOPE

The Army asked RAND's Arroyo Center to help assess Bold Shift and the contributions such programs may offer for future RC readiness. RAND researchers collected a variety of data that provide a snapshot of conditions and activities of Bold Shift units in 1992. Because Bold Shift was only in its first year in 1992, it is far too early to provide a definitive assessment of its ultimate effects. However, using those data, we have sought to understand what the 1992 experience revealed about underlying factors that affect training readiness and possible actions that could improve it in the future. The data sources included the following:

- Surveys designed by RAND and administered to personnel in Bold Shift units⁸

⁷A small number were engineer battalions, aviation groups, or medical detachments. Of the total of 82 units, 35 came from the USAR and 47 from the ARNG.

⁸The primary surveys included 649 leaders (commanders, senior staff, and first sergeants) and 18,504 other members of Bold Shift units. These were supplemented by surveys of battalion and brigade commanders and staff and participants in Operational Readiness Evaluations (OREs), the Unit Leader Battle Skills Course, and the Tactical Commanders Development Course. Confidential questionnaires were administered during inactive duty for training (IDT); 88 percent of Bold Shift units responded, and within those units returns were received from 94 percent of members present at IDT. For details of instruments and samples, see Hawes-Dawson et al. (1994).

- Records of annual training (AT), as documented in a new assessment procedure (the Training Assessment Model, TAM) and other data we requested from units and their sponsors⁹
- Visits to AT for 6 brigades and several nondivisional support units
- After Action Reviews (AARs) by active and RC unit commanders and by various chains of commands involved with Bold Shift
- Resource data provided by RC units and the active and reserve chain of command
- Reports of Operational Readiness Evaluations, describing special unit exercises and records inspections.¹⁰

In addition, we received extensive briefings and other documents related to training activities in 1992, visited many RC and AC headquarters and units, and discussed the Bold Shift program and training readiness issues with staff and senior leaders at FORSCOM, the National Guard Bureau, and the U.S. Army Reserve Command.

Our analysis centers on the activities and performance of Bold Shift pilot units during their 1992 AT period. We believe that AT provides unique insights into RC readiness, and it illuminates problems that will persist unless certain impediments can be eliminated. It is at AT that units reach their peak levels of collective training readiness. The Bold Shift units in 1992 were given a training program and resource priority that the Army believed could bring the units to an acceptable level of pre-mobilization readiness. Given these circumstances, it seems important to assess AT performance and to understand the underlying causes and potential remedies for any shortfalls observed.

⁹The TAM was a new method for assessing an RC unit during AT, including forms filled out by RC unit commanders and AC evaluators. The commander provided personnel readiness, AT attendance, and specification of tasks to be trained at AT; the AC evaluator assessed overall unit readiness, attainment of training goals, and proficiency on specific collective tasks. For evaluation forms and instructions, see Forces Command, *Training Assessment Model*, 1992d.

¹⁰See Appendix A for details on the ORE.

Of course, performance at AT is not an isolated event but rests upon several pillars, among which we believe three are paramount. First is the individual training and skill of unit members. Individual skills form the essential basis for a unit's collective training. A second pillar is the effectiveness of leaders. As the ODS experience revealed, leaders may not possess the required skill or experience to effectively direct their unit. Finally, AT performance and the unit's maximum peacetime readiness level depend on what the unit can accomplish during its weekend drills each month. The remainder of this report examines the performance of units at AT and the limitations that may result from deficiencies in these three pillars.

ORGANIZATION OF THIS REPORT

The next four chapters describe the above phenomena in considerable detail. Chapter Two examines training activities and performance at AT in 1992. Chapter Three addresses underlying personnel readiness issues, while Chapter Four looks at leader qualification and training. Chapter Five examines monthly drill training. Each chapter discusses how selected Bold Shift program initiatives were implemented in 1992, and each reports analyses and observations about achievements, shortfalls, impediments to training readiness, and potential improvements. Chapter Six summarizes our key observations and recommendations.

Previous studies also pointed to deficiencies in Army systems' portrayal of RC unit readiness. We did not analyze this general issue, but, as described in Appendix A, we did collect limited data on a related Bold Shift initiative, the Operational Readiness Evaluation. Also, Appendices B and C provide supplemental data on survey respondents' recommendations for improving AT and IDT and on the resources used to support the Bold Shift program in 1992. Appendix D summarizes the program's major elements.

UNIT TRAINING AND ANNUAL TRAINING

After ODS, it was generally accepted that the training readiness of most combat support (CS) and combat service support (CSS) companies and battalions was sufficiently high that they could meet deployment standards within acceptable timeframes. In addition, there was a general consensus that support units performed well in Southwest Asia (Department of Defense, 1991).

However, the collective proficiency of round-out brigades was below expectations (DAIG, 1991, pp. 3-5, 4-4). Before ODS, planners had assumed that crews and platoons, at least, would be proficient in peacetime; when units were called up, they were expected to begin post-mobilization training at company levels after a short period of lower-echelon remedial training (U.S. Army Readiness Group Atlanta, August 1990; DAIG, 1991, pp. 2-3, 3-5). These assumptions turned out to be invalid; the brigades needed considerable training at the levels of crew, squad, and platoon. During ODS, the brigade training plans were adjusted accordingly, extending the post-mobilization training period. Thus, much of the effort under Bold Shift was aimed at improving the collective training of combat maneuver units. Because any collective training requires heavy resource commitments—for ranges, maneuver areas, opposing forces, observer-controllers, and so forth—this effort focused on annual training (AT).

This chapter examines the activities and performance of pilot units during the 1992 AT period; it

- describes the unit training initiatives
- assesses the 1992 AT experience
- considers attainment of pre-mobilization training goals
- examines AT attendance and personnel turbulence.

UNIT TRAINING INITIATIVES

Echelon Level of Training

Refocusing training on lower-echelon formations was the most fundamental change in unit training under Bold Shift. Before ODS, the goal of peacetime training was to attain proficiency at all levels within the organization, which meant that RC brigades attempted to train the full range of echelons from crew through brigade. The training strategy in FORSCOM/NGB regulation 350-2 outlined a four-year cycle that began at crew level and built to a company- or battalion-level field exercise. Strategies for tank and Bradley infantry units called for alternating gunnery and maneuver years.

However, achieving this broad set of goals proved difficult, as documented in the DAIG's evaluation of the combat brigade mobilization during ODS. The DAIG's report concluded that post-mobilization training could be shortened if combat units concentrated on more achievable pre-mobilization goals (DAIG, 1991). It argued that units with well-trained crews and platoons and trained commanders and staffs would be preferable to organizations that needed intense training at all levels. It thus recommended gunnery training every year.

The Bold Shift strategy adopted this recommendation and emphasized training RC units at "achievable organizational levels" (Forces Command, 1991c). The pre-mobilization goals for RC units were to be the following:

- For tank and Bradley crews, qualified on crew gunnery tables; for infantry squads, qualified on live-fire exercises
- For combat maneuver platoons, proficient in critical tasks

- For CS and CSS units, proficient in critical tasks to the company level
- For commanders and staffs, trained on command and control functions for levels of company through brigade.

The Reserve Training Concept

To reach these goals, Bold Shift followed a new style of training called the Reserve Training Concept (RTC).¹ The RTC centered on highly structured and supported training on selected tasks in a training event called a "lane." The lane training was to be "turnkey"; that is, the AC was to provide the opposing force, observer-controllers, crew examiners, and other support personnel to allow the RC unit to focus on training and increase the number of tasks trained. It used an approach described as "crawl-walk-run," which emphasized preparing the leaders and the troops for a field exercise. For example, before attempting a lane, the leaders reviewed the objective and tactics and were prepared to lead the unit in a walk through the lane as well as the actual event. Thus, the leaders and their organizations would become familiar with the lane and confident about their ability before attempting it. This approach was often described as a "leader-teach" method.

During lane training, a unit would start by receiving formal training and evaluation for key individual and subunit collective tasks. Leaders would receive a review of the tactics required for the unit to execute those tasks. The leader would then prepare the order and present it to the trainer. After approval, the leader would give the order to the unit. Then the unit would rehearse, first on a terrain board, then by walking through the task on the ground at a reduced scale. Finally, if all these steps had been done to the trainer's satisfaction, the unit would conduct a full rehearsal and then an exercise at full speed against a enemy force.

¹The RTC model had previously been used at Fort McCoy, Wisconsin by a Continental U. S. Army (CONUSA) working with the National Guard's 32nd Infantry Brigade. The RTC method was also used in training the round-out brigades after they were mobilized for ODS (Fourth U.S. Army, 1991; Fifth Infantry Division, 1991; Crouch, 1992; Clark, 1991).

After the exercise, a detailed review of the training, called an After Action Review (AAR), was conducted. The AAR covered aspects that were done well and not well and discussed ways to improve future performance. If the exercise was not performed to the published Army standards, the unit would conduct remedial training and try again. The unit would normally not proceed to the next lane or training event until it performed the task to standard and demonstrated competence on the lane. The emphasis was on performance of tasks to the standard rather than on the number of tasks trained or on adherence to a schedule.

Of course, the lane model differed based on the type of unit. CSS units, such as maintenance and medical, might concentrate on technical tasks rather than maneuver tasks. Although much of the RTC focused on maneuver units, FORSCOM guidance encouraged battalions and brigades to “operate at the level organized”—meaning that they should be able to operate in a field or tactical setting, including self-sustainment in functions such as maintenance, supply, personnel, and command and control (Forces Command, 1992g). The goal was to include structured training for all platoons, sections, and soldiers in the organization.² For any unit, this type of training, unlike previous approaches, required significantly more trainers and better trainer preparation and support.

Active Component Training Involvement

Bold Shift also attempted to improve training management and AC/RC alignments by associating a particular AC unit with each RC pilot unit. The mechanism was to provide a “like-type” AC unit that was close to the RC unit’s armory or reserve center. For general oversight, each pilot unit was assigned to one of FORSCOM’s three active corps. The corps then identified a like-type active unit, called a sponsor unit.³ The AC and RC unit commanders were to jointly as-

²We found, however, that most units conducted little structured training for platoons and soldiers in service support and headquarters elements of the maneuver and CS units. Many units carried out their AT support and sustainment functions using outside sources rather than their own elements.

³The parent active division was given these responsibilities for each round-out and round-up brigade with the exception of the 81st Mechanized Infantry Brigade, whose

sess the pilot unit's training readiness, determine the specific tasks to be trained at the next AT period, revise the plans for IDT to better support the AT objectives, support the unit's IDT, and execute the RTC during AT. Although in some cases these connections were not announced soon enough during 1992 to permit extensive cooperation during the pilot year, overall we observed a great deal of activity resulting from these training alignments, particularly for the combat brigades.

ASSESSMENT OF ANNUAL TRAINING

To track unit training activities, RAND staff visited AT events for six round-out and round-up brigades during 1992, as well as several AT events for nondivisional support units. During these visits, we spent several days observing field training, talked with the troops and junior leaders, and spent time with the senior commanders from the RC unit and the supporting AC unit (including the division commanders for round-out brigades).

To collect more systematic information, we also fielded surveys of the participating units and the relevant parts of their chain of command. This enabled us to gauge reactions of the RC unit personnel to this new training experience. In addition, we obtained all the reports from the Training Assessment Model, the mechanism for documenting 1992 AT results. FORSCOM also arranged for us to collect supplemental data on gunnery and lane training results for the maneuver brigades.

Ratings of AT Effectiveness

Tables 2.1 and 2.2 show ratings of AT effectiveness, taken from surveys of RC personnel in pilot units.⁴ These tabulations indicate that both unit leaders and members felt that 1992 AT effectively prepared

parent was the 2nd Infantry Division in Korea. The 199th Mechanized Brigade at Fort Lewis was given responsibility for this brigade.

⁴The survey included separate samples of RC "unit leaders" and "unit members." The leader sample consisted of company commanders, first sergeants, and senior commanders and staff (including those in battalion and brigade headquarters). The second sample consisted of all other members of Bold Shift pilot units. For survey details, see Hawes-Dawson et al. (1994).

Table 2.1
Ratings of Effectiveness of 1992 Annual Training

Respondent Group	1992 Annual Training Effectiveness (percent of respondents) ^a				
	Extremely Effective	Very Effective	Somewhat Effective	Not Very Effective	Not at All Effective
Unit leaders	27	47	22	3	1
Unit members	17	38	32	8	5

^aBase numbers of cases for percentages: leaders, 14,659; members, 624.

Table 2.2
Ratings of 1992 Annual Training, Compared with Previous ATs

Respondent Group	1992 Annual Training vs. Previous Years (percent of respondents) ^a				
	Much Better	Somewhat Better	About the Same	Somewhat Worse	Much Worse
Unit leaders	46	27	14	10	3
Unit members	37	25	22	9	7

^aBase number of cases: leaders, 12,107; members, 605.

their units for their wartime mission and was better training than they had experienced in previous years.

Throughout the survey analyses, the leaders were somewhat more likely to express positive views about 1992 events (and other aspects of the Army); in Table 2.1, for example, 96 percent of the leaders and 87 percent of members gave AT an overall positive rating.⁵ In general, however, the responses of the leaders and members run in parallel directions and yield the same conclusions; so in the remainder of this report, we concentrate on the leader responses.

Leaders also rated lane training and Situational Training Exercises very high. As shown in Table 2.3, 81 percent indicated that such

⁵A chi-square test of this difference in proportions was statistically significant at the .01 level. All such differences discussed in this report were tested and found to be significant (as would be expected in the presence of large sample sizes).

Table 2.3
Effectiveness of Lane Training and Leader Training

Item	Effectiveness Rating (percent of respondents) ^a				
	Extremely Effective	Very Effective	Somewhat Effective	Not Very Effective	Not at All Effective
Lane training and Situational Training Exercises	42	39	14	3	2
Squad, section, or platoon operations	31	46	19	3	1
Training in leadership tasks	21	45	30	3	1
Providing leaders opportunity to lead in the field	28	39	23	7	2

^aBase number of cases ranges from 294 to 499.

training was either extremely effective or very effective. During 1992, most squad, section, and platoon operational training was accomplished using the lane concept, and those activities, too, were rated high. Similarly, about two-thirds of the leaders rated this year's AT as extremely or very effective in providing training in leadership and opportunities to lead.⁶

Acceptance of the Bold Shift Program

In numerous other survey responses, RC personnel endorsed the Bold Shift program. For example, 94 percent of the unit leaders recommended that the Bold Shift program be continued in their own unit, and 91 percent recommended it be expanded to other units. Also, as indicated by Table 2.4, the new training goals—including the focus of training at lower echelons—were widely accepted in the RC units. This change, focusing training at crew, platoon, and company levels, was an item of controversy at the initiation of the Bold Shift program, but the participants supported the revised focus. In fact, as many leaders saw the focus of AT as being at *too high* a level (e.g., a

⁶For specific recommendations of respondents on how to improve AT further, see Appendix B.

Table 2.4
Level of Training Focus

Statement	Rating of Training Focus (percent of respondents) ^a				
	Strongly Agree	Somewhat Agree	Unsure	Somewhat Disagree	Strongly Disagree
The training focus was at too high a level	5	14	6	28	47
The training focus was at too low a level	5	12	5	28	50
Training did not focus on the most important tasks	6	14	6	29	45

^aBase number of cases: 613.

unit being trained at platoon level when crew and individual skills were weak) as saw it as being at too low a level. Almost three-fourths of the leaders felt that the training focused on the most important tasks.

Similarly, the responses of RC higher-level commanders and AC AARs were almost universally, and generally strongly, in favor of the revised training goals and methods. The response from the National Guard Bureau (NGB), which had expressed the greatest initial concern over this change, supported the RTC but emphasized the need for the new training goals to be considered "floors" rather than ceilings. NGB argued that units should be permitted to move to higher echelon training once proficiency in floor objectives is obtained (NGB, 1992b).

Acceptance of Active Component Training and Support

An important aspect of creating successful field and leader training is the quality of the support provided by the trainers and observer-controller (OCs) and the feedback they provide. Table 2.5 provides survey results on the effectiveness of the trainers and OCs, most of whom were AC personnel from the sponsor unit. Over 80 percent of the leaders rated the performance of the trainers and OCs as very good or good. This positive view was reinforced by the RC leaders'

overall rating of AC support, as shown in the lowest panel of Table 2.5.

We found, however, that the RC leaders did not feel they needed more active-duty support. In fact, the number of personnel involved in direct support to 1992 AT averaged about 1,000 for the round-out and round-up brigades; for the support companies, it averaged about 14.⁷ Given this level of support, most RC leaders felt that additional AC trainers would be marginally beneficial.

Clearly, most leaders felt that AC support was effective and of high quality, but some of the AC and RC leaders we interviewed during AT felt the RC chain of command could have been more involved in training their units. While RC leaders were supposed to be actively involved under the RTC, the nature of their involvement was unclear in this context.⁸ Recall that the new pre-mobilization goals focused on echelons at platoon and below. Because this was a pilot year, it was unclear what role the company commanders should play in the

Table 2.5
Ratings of AC Support for Training

Item	Rating of Item (percent of respondents) ^a				
	Very Good	Good	Fair	Poor	Very Poor
Support and assistance from trainers and OCs	43	39	14	5	1
Feedback and performance evaluation from OCs	38	43	12	5	2
	Extremely Effective	Very Effective	Somewhat Effective	Not Very Effective	Not at All Effective
AC support to 1992 annual training	39	36	15	6	4

^aBase number of cases ranges from 613 to 620.

⁷From resource reports provided by AC and RC commands (Appendix C).

⁸FORSCOM guidance stressed that company commanders should perform normal tactical command and control functions during lane training.

training process. In many cases, they acted largely as part-time passive observers.⁹

Many felt there were opportunities to involve the company commanders more and provide them with meaningful training. For example, they could prepare and issue operations orders for the lanes being executed and follow up by closely monitoring the leader-teach portion, lane execution, and AARs. With competent mentoring on the Army standards applicable to the lane and mentoring on effective AAR techniques by the AC observer-controllers, the company commander could be trained to execute the leader-teach portion and the AARs. The commander would be trained while the first few units went through the lane, and then, under monitoring by the active OCs, he could become one of the trainers and conduct the AARs to standard.

ATTAINMENT OF PRE-MOBILIZATION TRAINING GOALS

The following sections discuss the success of the Bold Shift pilot units in attaining their pre-mobilization training goals by the end of 1992 AT. To assess the units' training readiness, we examined the AC evaluators' assessments, the yearly training plans, and the training plans for AT in 1992, concentrating on the combat brigades and nondivisional support units. Based on these data, we conclude that none of the maneuver battalions had reached their pre-mobilization training goals by the end of 1992 AT. Among nondivisional support units, about one-third appeared to reach the goals. Below we discuss the detailed outcomes, first for brigades and then for support units.

Combat Brigades: Gunnery

Table 2.6 summarizes AT gunnery activities for six of the combat brigades during 1992.¹⁰ Only four of the six brigades fired tank

⁹Alternatively, they sometimes acted as platoon leaders for squad lanes. In some cases platoon leaders were executing Bradley gunnery while dismounted squads trained on lanes. Commanders obviously had other responsibilities, such as logistics support and maintenance, but these did not require full time.

¹⁰The seventh brigade included in Bold Shift was a round-out to a division that was scheduled to be deactivated; many of the brigade's units were being relocated, and

Table 2.6
Combat Brigade Gunnery Activities, 1992 AT

Brigade	Tank Battalions			Mechanized Infantry Battalions		
	Number of Bns	Vehicle	Gunnery Activity	Number of Bns	Vehicle	Gunnery Activity
A	1	M1	Table VI ^a	2	Bradley	Table VI
B	2	M1	None ^b	1	Bradley	None ^b
C	1	M1	Table VIII	2	Bradley	Table VIII
D	2	M1	Table VIII	1	M113	(c)
E	1	M1	Table VIII	2	M113	(c)
F	1	M60	None ^d	2	M113	(c)
Number of bat- talions con- ducting gun- nery			5	4		
Number of crews authorized			290	234		

^aBrigade scheduled gunnery only through Table VI; did not attempt Table VIII.

^bBrigade sent members to school and did individual training; did no gunnery.

^cBrigade had only M113 vehicles, which do not conduct gunnery.

^dBattalion underwent New Equipment Training (NET) for M1 tank; did no gunnery.

gunnery that year; brigade B did not fire because of schooling requirements, and brigade F was in New Equipment Training (NET) converting from the M60 to the M1 tank.¹¹ Furthermore, although brigade A conducted some gunnery, it did not attempt Table VIII; its crews fired only tank Table VI.¹²

All the other brigades scheduled and conducted Table VIII for their tanks. These gunnery events yielded data on 5 tank battalions. Since

their attendance at AT was spotty. Therefore we did not attempt to assess that brigade's gunnery or maneuver programs.

¹¹Each brigade includes 3 maneuver battalions. Brigades designated B and D were armor brigades, which contain 2 tank and 1 infantry battalion. Those designated A, C, E, and F were mechanized infantry brigades, which contain 1 tank and 2 infantry battalions.

¹²Table VIII for the M1 tank and Bradley infantry fighting vehicle is the final crew-level gunnery qualification exercise. Tables I through VII are tables that build skills before final qualification. For more details, refer to Field Manual FM 17-12-1 and FM-23-1 (Department of the Army, 1986, 1991a).

each battalion has 58 tanks authorized, if the battalions had reached their full pre-mobilization goals they would have qualified a total of 290 tank crews. That is the target number that we will use to assess the results.

Among the mechanized infantry, a similar set of gunnery tables was fired by two units that possessed Bradley infantry vehicles (brigades A and C). However, brigades D, E, and F had only M113 infantry vehicles, which do not have main guns; therefore, they conducted no crew gunnery. Thus, the infantry gunnery results include only 4 battalions of Bradleys, which include a total of 234 authorized Bradley crews.

Table 2.7 displays the outcomes of AT gunnery. Among the tank results (the left-hand column of the table), note first that only 198 of the 290 authorized crews (68 percent) participated in AT. Thus, from the outset, at least 32 percent of these crews could not attain full gunnery qualification.¹³ In addition, 46 crews who did fire gunnery were from brigade A, which fired only Table VI. That left a total of 152 crews present in units that attempted Table VIII. Among them, 85 crews successfully qualified.

As shown in the lowest panel of Table 2.7, among the 152 crews attempting Table VIII, 56 percent qualified. However, if we consider all of the crews that participated in gunnery, the qualification rate drops to 43 percent. In either case, the results fall considerably short of full Table VIII qualification.¹⁴

A more stringent criterion would consider the full number of authorized crews, including those who missed AT. As shown in the last

¹³Many of them were away at required individual school courses, as will be discussed below.

¹⁴An additional yardstick for assessment, often used in the AC, is the number of crews that qualified on the first run of Table VIII. Among the 85 crews who qualified at AT 1992, 28 percent qualified on the first run (Q1); 66 percent on the second run; and 6 percent on the third run. Although we have no direct observations on other units, many field commanders and soldiers have reported that active crews normally qualify Q1, and that among a group of fully trained crews (ready to go to war), one would expect the large majority to qualify Q1.

Table 2.7
Gunnery Results for Bold Shift Maneuver Units
(5 battalions conducting gunnery)

Item	M1 Tank	Bradley Infantry Vehicle
Number of crews authorized	290	234
Number of crews present at AT	198	117
Crews present at AT, as percent of authorized	68	50
Number of crews in units attempting Table VIII	152	63
Number of crews qualified on Table VIII	85	56
Crews Table VIII qualified, as percent of those attempting Table VIII	56	89
Crews Table VIII qualified, as percent of those present at AT	43	48
Crews Table VIII qualified, as percent of authorized	29	24

row of Table 2.7, against this criterion the qualification rate is only 29 percent.

The right-hand section of Table 2.7 shows gunnery results for Bradleys. Attendance at AT was even lower for Bradley crews than for tanks; only 117 of 234 authorized crews participated (50 percent). Among the 117 Bradley crews present, 63 were in the one brigade that attempted Table VIII, and 56 of them qualified. Thus, within that one brigade the crews achieved a very high qualification rate, 89 percent.¹⁵

The overall Bradley qualification rate, however, was severely impacted by AT absences and failure to fire Table VIII. As the last line of the table shows, across the 4 battalions firing gunnery, only 24 percent of the authorized crews qualified on Table VIII.

The one brigade that was successful in qualifying crews at AT had conducted gunnery during monthly drill weekends. This gunnery included the Tank and Bradley Gunnery Skills Tests and gunnery ta-

¹⁵Of those crews who did qualify, 80 percent qualified on their first run (Q1) and 20 percent on their second run. Most crews were able to apply proper engagement techniques and hit the target with acceptable frequencies. Qualification shortfalls were usually due to a crew's taking more time to engage than permitted in the standard.

bles through Table VI. The crews in this brigade were also successful in all tables leading to qualification on Table VIII.¹⁶

Most of the crews in the other brigades had received very limited training with their actual vehicles during drill periods. This led to difficulty in sustaining those skills that they had practiced the previous year; as a result, their gunnery performance was only fair on Table VI and poor on Table VII. Tables VI and VII are not required "gates" to Table VIII, according to Army doctrine, but performance would have been improved if the earlier tables had been fired for practice. Their omission was a case where the brigades did not successfully apply the RTC strategies of "crawl-walk-run" and "train to standard, not to time." In many cases, the schedule was too ambitious given the recent training experience of the crews, and many units were not willing to step back from the high goals they had set for this AT period.

In sum, based on the gunnery results of AT in 1992, it appears difficult to meet the pre-mobilization goal of qualifying crews on Table VIII. Overall, only 29 percent of authorized tank crews and 24 percent of Bradley crews qualified on Table VIII during 1992 AT. Two key conditions will have to be fulfilled for this goal to be met in the future: (1) crews will have to spend time in monthly drill training practicing gunnery skills, both in simulators (Conduct of Fire Trainers) and in the field on the lower-level tables; and (2) a much larger percentage of crews will have to attend AT for Table VIII qualification.

Combat Brigades: Maneuver Lane Training

Table 2.8 shows the types of maneuver lanes that the 6 brigades executed during 1992 AT. For these types of units, the primary focus was on exercises involving sections (2 vehicles) or platoons (4 vehicles).¹⁷ The Bold Shift goals called for proficiency in platoon ma-

¹⁶This brigade had also been mobilized during ODS and had efficiently run gunnery training programs at that time.

¹⁷The configuration of echelons is as follows: 2 tanks or Bradley vehicles per section; 2 sections per platoon (4 vehicles); 3 platoons per company (12 vehicles); 4 to 5 companies plus a headquarters company per battalion (a total of 58 vehicles).

Table 2.8
Combat Brigade Lane Training, 1992 AT

Brigade	Tank Battalions			Mechanized Infantry Battalions		
	Number of Bns	Vehicle	Lane Training	Number of Bns	Vehicle	Lane Training
A	1	M1	Section lanes	2	Bradley	Section lanes
B	2	M1	None ^a	1	Bradley	None ^a
C	1	M1	Section lanes	2	Bradley	Platoon lanes ^b
D	2	M1	None ^c	1	M113	Platoon lanes
E	1	M1	None ^c	2	M113	Platoon lanes
F	1	M60	None ^d	2	M113	Platoon lanes
Number of battalions conduct- ing lanes			2	3 Bradley 5 M113		
Number of sections/ platoons authorized			48 ^e	60 Bradley ^f 60 M113 ^g		

^aBrigade sent members to school and did individual training; did no gunnery.

^bOnly one battalion did lanes; the other battalion did only gunnery.

^cBattalions did only gunnery; conducted no lanes.

^dBattalion underwent New Equipment Training (NET) for M1 tank; did no gunnery.

^e48 sections (2 battalions × 24 sections per battalion).

^f48 sections (2 battalions × 24 sections per battalion) + 12 platoons (1 battalion × 12 platoons per battalion).

^g60 platoons (5 battalions × 12 platoons per battalion).

never, so to achieve full qualification the units should have carried out maneuver lanes with platoons. However, among the armor units, only 2 tank battalions (from brigades A and C) executed lanes, and both were at section level. As we noted above, brigade B devoted its AT period to schooling and individual training, and brigade F conducted New Equipment Training. Tanks in brigades D and E concentrated entirely on gunnery, to the exclusion of maneuver lanes. We therefore collected data on only 2 tank battalions, for which a total of 48 sections were authorized.

The mechanized infantry units conducted more maneuver training. Two Bradley battalions from brigade A carried out section lanes. In

addition, one Bradley battalion from brigade C carried out platoon lanes. The other Bradley battalion from brigade C encountered difficulty during gunnery and restarted its gunnery sequence from the beginning. As a result, it eliminated the maneuver lanes that had been planned in its schedule.

In addition, all infantry battalions with M113 vehicles conducted platoon-level lanes (brigades D, E, and F). They had a less demanding schedule than the others, of course, because the M113s require no gunnery. Altogether, the infantry lanes were conducted for battalions that were authorized 120 subunits (60 Bradley sections or platoons, and 60 M113 platoons).

In addition to the higher-echelon lanes, the infantry units (with Bradleys and M113s) executed lower-echelon dismounted squad drills leading up to the platoon and section lanes. One M113 battalion executed a daytime squad live-fire exercise. Lanes were also provided to the scouts, mortars, engineers, and, in some cases, to the companies of the support battalions. Although we do not review the results here, these types of units generally performed successfully.

One important limitation was that each unit attempted either offensive or defensive lanes; none of the units attempted both. Also, the lanes contained only a limited subset of the tasks that would be required to be fully proficient at platoon maneuver.

The lanes were run by the AC sponsors and followed the RTC. That is, units were prepared for the lanes, given AARs after each execution, and if necessary were afforded the chance to rerun the exercise. Table 2.9 shows the results, which suggest that this "crawl-walk-run" strategy worked well. With few exceptions, these units did little or no field maneuver training during the IDT weekend drills and arrived at AT without much recent practice. Although many units had to execute the lanes more than once, the RTC strategy worked as intended (i.e., the units trained to standard not to time) and all units eventually received a rating of T or P.¹⁸

¹⁸Department of the Army, Field Manual 25-101 (1990) gives the following definitions: *Trained (T)* means that the unit can successfully perform the task to standard. Practice to be designed to sustain proficiency. *Needs Practice (P)* means that the unit can perform the task with some shortcomings. Not severe enough to require complete

Table 2.9
Lane Results for Bold Shift Maneuver Battalions
(8 battalions conducting maneuver lanes)

Item	Vehicle Type		
	M1 Tank	Bradley Infantry	M113 Infantry
	Sections	Sections/ Platoons	Platoons
Number of units authorized	48	60	60
Number of units present at AT	24	28	35
Units present at AT, as percent of authorized	50	47	58
Number rated "trained" (T)	2	11	11
Number rated "needing practice" (P)	22	17	24
Number rated "untrained" (U)	0	0	0
Units rated T, as percent of those present	8	39	31
Units rated P, as percent of those present	92	61	69
Units rated T or P, as percent of those authorized	50	47	58

As Table 2.9 shows, less than one-third of the platoons and sections received a rating of T for lane performance; the remainder received a P.¹⁹ The two-thirds who received a P rating would need additional practice to master some of the lane tasks. This implies the need for additional post-mobilization training time to reach the pre-mobilization goals for these tasks (in addition to the full amount of training that would be needed for the tasks not included in the lanes). Moreover, as we saw in gunnery, the maneuver lanes suffered from low participation rates. Of the authorized number of sections or platoons, about 50 percent actually executed the lanes, and many of them were composite formations (i.e., made up of leaders and soldiers from multiple organizations). Therefore, if these units were to be mobilized immediately after AT, at least half of the platoons or

retraining. Refresher training needed. *Untrained (U)* means that the unit cannot perform the task to standard.

¹⁹These percentages were derived from special reports provided by the divisions, in which they gave an overall rating of the proficiency displayed on the maneuver lanes.

sections would be starting from scratch, again requiring additional post-mobilization training.²⁰

Finally, we note that mechanized infantry units, particularly Bradley platoons, face an especially difficult goal because of the wide range of tasks and participating subunits. Bradley operations include not only the vehicle crew but also the squads that ride in the vehicle and dismount for some purposes. The Bradley platoon tasks require four vehicles and two squads to operate together—a complicated endeavor. Training such groups in maneuver is probably more difficult than fully training tank platoons.

Bradley units face quite a number of other requirements as well. For example, the platoon's four Bradley crews must be trained to essentially the same standards for gunnery and mounted maneuver tasks as tank units. Bradley crews also have a separate qualification table for TOW anti-tank missiles (which none of the Bradley battalions attempted during 1992). The two squads in the platoon must qualify on their individual weapons, and one member of each squad must qualify on the Dragon anti-tank missile. In addition, the infantry squads are required to collectively qualify on a live-fire exercise. None of the Bradley-equipped units conducted an infantry live-fire exercise during 1992. Given this long list of requirements and about 39 training days per year, reaching the pre-mobilization goals may be a tall order, especially for the Bradley-equipped infantry.

Based on the results of AT for the 6 brigades in 1992, it appears that it will be quite difficult to meet the pre-mobilization training goals of competence in platoon maneuver (receiving a T):

- Only 2 out of 8 armor battalions attempted maneuver.
- Only 3 out of 5 Bradley battalions attempted maneuver.
- The 2 armor battalions that conducted maneuver lanes, and 2 of the 3 Bradley battalions, ran section but not platoon lanes.
- These units did either offense or defense, but not both. This leaves a number of untrained tasks.

²⁰For a discussion of training activities during the post-mobilization period for combat units, see Lippiatt et al. (1992b).

- Most lanes were daytime only, with few or no nighttime exercises.
- Among the battalions that executed maneuver, only half of the authorized number of platoons or sections participated in AT.
- Roughly two-thirds of the units that participated received ratings of P, indicating that they required some additional training.

Support Units

The types of tasks performed by support units vary widely, and methods of performance evaluation are less standardized than for the maneuver units. Bold Shift also gave much less attention to such units and did not specify extensive data to be collected. However, to get a broad assessment of support units, we collected the evaluations for 1992 AT showing the independent evaluators' view of the units' pre-mobilization readiness. Some of these units were within the combat brigades (e.g., artillery batteries and engineering companies), while others were "nondivisional" support units.²¹ We defined a support unit as trained to its pre-mobilization goal if the evaluation indicated that the unit had reached that goal and that the unit needed no additional training days to attain the target training level.²²

By this criterion, 34 percent of the nondivisional CS and CSS units were trained to their pre-mobilization goals. Within the combat brigades, none of the field artillery batteries or battalion headquarters companies were reported to have attained their pre-mobilization goals. However, 25 percent of the combat engineering companies and 25 percent of the companies in the brigades' support battalions, including headquarters companies, did reach their goals. These results are in keeping with our general impression that company-level proficiency is attainable for support units, although in practice most of the CS and CSS companies still have a distance to go.

²¹These "nondivisional" units are particularly important because many of them would be needed early in a contingency (earlier than the combat brigades). They are located at echelons above division.

²²For TAM documentation, see U.S. Army Forces Command (1992e), items 12 and 13.

ANNUAL TRAINING ATTENDANCE AND PERSONNEL TURBULENCE

Evidently, one of the most important factors inhibiting collective training and limiting units' abilities to meet their pre-mobilization goals is the low rate of attendance at AT. Recall, for example, that only about two-thirds of the tank crews were present for AT, and only half of the maneuver sections and platoons were present. These absences limit attainment of pre-mobilization goals and degrade collective training in several ways:

- AT is the culminating event in the yearly training effort, and if personnel do not attend they are not trained to the same level as those who participate.
- When some crew members are missing, units form "composite" crews for AT purposes. These crews have not worked together before and are likely to scatter when they return to the unit, thus reducing the collective training value accrued from AT.
- Effective unit performance requires the personnel in the organization to train together for a sufficient duration to gain collective proficiency. For many units, AT is the only chance to practice skills that require access to their vehicles (such as gunnery and maneuver). So the loss of collective training time from AT strips away a large amount of training opportunity.

In examining the participation reports for 1992 AT, we found that one of the main reasons for non-attendance is the need for many soldiers to attend individual training courses. They need these courses to become qualified in their duty MOS (DMOSQ) or to receive professional education appropriate for a noncommissioned officer (NCO) or officer position. Table 2.10 exhibits 1992 AT attendance data showing the percent of assigned personnel for six categories:

- Those who attended AT with their unit
- Those who were given constructive credit for attending a school to attain initial MOS qualification (entry MOS)

Table 2.10
Annual Training Attendance and Constructive Credit
(percent of assigned personnel)

Unit Type	Attended AT	Received Constructive Credit				Not at AT, and Received No Credit
		School: Entry MOS ^a	School: Changing MOS ^b	School: NCOES and OES	Other Credit	
ODS brigades ^c	69	8	4	10	4	5
Non-ODS brigades ^d	70	7	4	4	6	9
Support units ^e	62	12	3	4	6	13

^aPersonnel in grades E1–E3 attending initial MOS qualification training.

^bPersonnel in grades E4–E8 attending school to qualify in a new MOS.

^cTwo brigades that were mobilized during ODS and also conducted gunnery during 1992 AT. Number of personnel = 5,545.

^dBrigades not mobilized (116th, 218th, and 81st). Number of personnel = 12,959.

^eNondivisional support units (Echelons Above Division and Echelons Above Corps).

- Those who had recently changed their MOS and were given credit for attending a school to requalify (changing MOS)²³
- Those who were given credit to attend a professional development school (NCOES or OES)
- Those who did not attend AT with their unit but did receive credit for other reasons (other credit)²⁴
- Those who missed AT and received no credit.

These results show that in the combat brigades, about 70 percent of all personnel assigned to the unit attended AT; in the support units, the rate was even lower, 62 percent. Recall also that some of the slots in these units are not filled at all; that is, although the unit may be authorized a given number of personnel, the number assigned may

²³Persons who attended MOS-producing courses were divided into two categories: “Entry MOSQ” personnel, defined as E1s, E2s and E3s; and “Changing MOSQ” personnel, defined as E4s through E8s. Professional schools included both those in the NCO Education System (NCOES) and Officer Education System (OES).

²⁴The other credit category includes those who were given constructive credit for attending AT with another unit or at home station, and those who had a personal excuse, such as personal or health problems.

be lower. After adjusting the data to represent the percent authorized, we found that approximately 61 percent of the authorized end-strength attended AT in 1992, for each of the above types of units.

Attendance was a problem for all unit types and has been so for many years. We examined historical AT attendance data for these same units and found the attendance rates have been about the same for the last five years.²⁵

Low attendance rates also caused much of AT training to be conducted with composite organizations (units or crews formed from members of similar types of units to make a crew, squad, or platoon with enough strength to conduct collective training). Using composite crews can provide effective individual training but does not produce fully trained and integrated crews or units. While we do not have systematic data on the number of composite crews, we did observe a number of them during visits to 1992 AT training events.

Absence of key crew members particularly seemed to affect the ODS brigades. As Table 2.10 shows, 10 percent of all unit personnel in these brigades were attending professional school and were therefore not at AT in 1992.²⁶ This may have been due to the attention professional schooling received during the ODS mobilization, or the units that participated in ODS may have had a larger backlog of personnel needing schooling because they could not send soldiers to school while mobilized. Whatever the reason, we found that professional schooling especially affected leaders of maneuver companies within these brigades. The key building block in such companies is the crew or squad, especially the team of vehicle commander and gunner. The vehicle commanders also make up the NCO and officer leadership (squad and section leaders, platoon sergeants, and platoon leaders). Table 2.11 shows 1992 AT attendance data for high-ranking personnel (E5s through captains) in these companies.

²⁵Based on FORSCOM 1R reports (describing results of Annual Training) for 1988 through 1991.

²⁶The data in Table 2.10 represent only the two brigades that attempted gunnery and maneuver this year. Constructive and non-constructive credit data were not available from the third ODS brigade that curtailed training during 1992 because of its high rate of school attendance and its focus on individual and small-unit collective training.

Table 2.11
Annual Training Attendance and Constructive Credit
(ODS brigade maneuver company leadership)

Unit Type	Percent of Senior Personnel ^a				
	Attended Annual Training	Changing MOS	NCOES and OES	Other CC	NO CC
Armor companies	66	2	23	2	7
Infantry companies	67	6	22	2	3

^aManeuver company personnel in grades E5 through O3, within ODS brigades that conducted gunnery in 1992.

Nearly one-fourth of these leaders were away at professional school during 1992 AT. That undoubtedly contributed to the low percentage of crews and maneuver units that participated in gunnery and maneuver training, and it probably caused formation of numerous composite crews, squads, and platoons that had not worked together as integral units before AT.

How could these attendance problems be overcome? One way, often advocated within the RC, is to send individuals to schools during additional paid time, using funds for "additional duty for training" (ADT) so that their schooling does not detract from collective training. Among survey respondents, 42 percent of those who had recently completed an MOS course had done so using ADT money. To improve AT attendance for high-priority units, the Army could allocate more ADT funds to such units or reallocate existing funds from other units.²⁷ To assess the feasibility of expanding that approach, the survey asked respondents if they would be willing to take extra time to attend schools. Table 2.12 shows that many would do so; only 29 percent of the unit members and 12 percent of the unit leaders were not willing to go to some form of additional training. The

²⁷A similar need exists for leader training. Recently, the Army increased requirements for NCOES in the RC. This change has created a large backlog of personnel who need professional schooling for their current grade, as well as those who need it for promotion. This backlog will take some time to reduce, and therefore it may continue to affect AT.

Table 2.12

**Willingness of RC Personnel to Attend Two Weeks of Additional Schooling
or Training**

Type of Training or Schooling	Percent of Respondents ^a	
	Unit Leaders	Unit Members
An additional 2-week training period	57	48
Up to 7 additional IDT weekends per year	12	12
A combination of one 5 to 7 day period and additional IDT weekends	19	11
Could not do any of the above	12	29

^aBase number of cases: 619 unit leaders; 16,898 unit members.

main reasons given were that additional training would conflict with civilian jobs or attendance at civilian schools.

However, such an approach can only be a partial solution. The need for schooling reflects a pervasive set of personnel readiness problems, including frequent personnel turnover that drives up training requirements and holds down rates of MOS and leader qualification. The 1992 AT experience documented these problems graphically. In the TAM, for example, unit commanders reported that the turbulence rate was 15 percent in the quarter preceding 1992 AT.²⁸ This may not be representative of all quarters during the year: Some observers believe that attrition tends to be higher just before AT. This does, however, affect performance at AT because it degrades collective skills that have been developed and sustained during the year. Furthermore, changes of positions among tank and Bradley crews appeared very high. According to the 1992 data, 61 percent of the tank crews and 56 percent of the Bradley crews had changed vehicle commander-gunner combinations since the previous AT period. As we will argue in detail in the next chapter, such rates of movement undercut all types of collective training and pose a fundamental problem that needs resolution.

²⁸In the TAM, turbulence is measured as the percentage of soldiers who changed jobs within the unit over a specified time interval; it includes attrition (departure from the unit) as well as shifts of personnel among jobs within the unit.

PERSONNEL READINESS AND SKILL QUALIFICATION

Personnel readiness—having the right number of soldiers with the correct skills—is a major challenge for RC units. As the assessment of AT shows, lack of individual qualification seriously limits collective training, and it prevents units from reaching their pre-mobilization training goals. In addition, Army regulations require soldiers to meet certain skill qualification standards (and other individual readiness criteria) before they can be deployed. If many soldiers in a unit do not meet the standards, the unit may be delayed in its post-mobilization training while individual members are trained or new personnel are brought in (“cross-leveled”) from other units.

The challenge of personnel readiness is much more difficult for RC units than for the AC. An RC unit must recruit new members from the local area. Recruits who have never before served in the Army need initial entry training, which can take up to two years; in the meantime the recruit is both unqualified for a duty position and nondeployable. If they have previously served in the AC or in an RC unit, new personnel may come to the unit with the correct skills, but usually they will have to be retrained after joining the unit. Time for that training will compete with the members’ civilian job obligations. An active unit, in contrast, benefits from a personnel system that recruits from the nation as a whole and that provides the unit with soldiers trained in required skills.

As documented by the DAIG (1991), pre-mobilization personnel readiness was a serious problem for the combat brigades in ODS. RAND observations during ODS indicated a similar situation among support units. This chapter discusses the personnel readiness status

of Bold Shift pilot units during 1992. We find that personnel readiness problems remain widespread in RC units, that the situation has not improved appreciably since ODS, and that the problems are driven by high rates of personnel turnover, which will need to be ameliorated if RC collective training efforts are to achieve their full potential.

MEASURING PERSONNEL READINESS

A widely used measure of personnel readiness is that contained in the Army's Unit Status Report system. In that system, personnel readiness is a function of two major parameters, defined as follows:¹

- *Available strength*: The percentage of wartime required personnel who are medically, physically, and legally deployable.
- *Available MOS trained strength (DMOSQ)*: The percentage of wartime required personnel who are both available to deploy and MOS qualified for their assigned duty position (duty MOS qualified).

These percentages are used in determining a unit's readiness level or "C-Rating," as shown in Table 3.1. In the past, Army practice has required combat units to be C-1 and support units to be C-2 or C-3 before they can deploy to an overseas theater.

Table 3.1
C-Rating Criteria

C-Rating	Percent Available	Percent DMOSQ
Level 1	90–100	85–100
Level 2	80–89	75–84
Level 3	70–79	65–74
Level 4	Less than 70	Less than 65

¹For details, see Department of the Army, Regulation AR 220-1 (1991b). There is also a third parameter used in determining personnel readiness, available senior grade strength, which is not considered in this discussion.

Officers do not have an MOS or branch qualification requirement per se. For purposes of unit status reporting, officers may be considered MOS trained when they have completed an Officer Basic Course (OBC) for any branch and the unit commander feels that they have the minimum skills needed to perform the wartime duties of their assigned position.² Accordingly, most discussions of personnel readiness, including our analyses, focus primarily on DMOSQ among enlisted personnel. From time to time, however, we will comment on officers' "branch qualification" as an analog to the enlisted requirement.

EXPERIENCE DURING OPERATION DESERT SHIELD

Combat Brigades

For the three combat brigades mobilized during ODS, the Army goal was to bring the units up to C-1 status before deployment. At the time they mobilized, these three brigades had available personnel strength levels above 90 percent (DAIG, 1991, pp. 3-11). However, before mobilization their available DMOSQ rates ranged from 75 to 80 percent, whereas comparable AC brigades ranged from 90 to 95 percent (General Accounting Office, 1992b, p. 25).

All observers reported that the available DMOSQ strength was a major driver of actions to improve personnel readiness after mobilization. Considerable efforts were made to raise the available DMOSQ rate. In addition to cross-leveling personnel into the unit, the Army provided MOS schooling for more than one thousand soldiers (among a total of 12,000 personnel in the three brigades) (DAIG, 1991, pp. 3-12).

Officer qualification presented a related problem. At mobilization, many of the lieutenants in the brigades had not completed OBC, which meant that many were nondeployable. The percentage who had not attended OBC ranged from 14 to 46 percent for two brigades examined by the General Accounting Office (GAO, 1992b, p. 14). Commenting more broadly on leaders in these brigades, the GAO found that their lack of basic skills created difficulties during post-

²Exceptions apply to medical officers (Department of the Army, AR 220-1, 1991b).

mobilization training in the areas of "tactical and technical competence, understanding and applying training standards, and enforcing discipline" (GAO, 1992b, p. 15).

The combat brigades also had considerable numbers of personnel judged temporarily nondeployable (typically because of dental problems, lack of dental records, or lack of recent physical examinations for those over 40 years of age). Although these problems were largely solved during the mobilization station process, 10 to 14 percent of the personnel remained permanently nondeployable, despite extraordinary effort (GAO, 1991; GAO, 1992b, pp. 24–25).

Support Units

During ODS, a large number of nondivisional CS and CSS units were called to duty.³ Army procedures normally require that units have a minimum C-Rating of C-3 before deployment unless the gaining theater commander agrees otherwise (Forces Command, 1986). For support units, that level remained the official criterion for deployment during ODS, although the Army endeavored to bring units up to higher levels before deployment, where practical.

To meet the C-3 requirement, considerable cross-leveling of personnel took place in the support units. The Army National Guard Bureau reported that 97 percent of its support units deployed to ODS were C-3 or better upon federalization. However, this level was achieved in part because a mobilization was anticipated; as the call-up approached, many personnel were moved into the units before they were sent to the mobilization station (National Guard Bureau, 1991, p. 15).⁴ RAND observed similar patterns in the mobilization

³See GAO (1992a) and Lippiatt, Polich, and Sortor (1992a). Some companies and battalions performing support functions also existed within the combat brigades (e.g., artillery battalions and engineer companies), but they have been treated as part of the brigades in this study.

⁴RAND analyses of peacetime versus mobilized RC units indicate that, on average, nearly 20 percent of the personnel in units at mobilization stations during ODS had been cross-leveled into the unit from some other source.

process of USAR units. Additional cross-leveling occurred at the mobilization station.⁵

NGB also noted that only 6 percent of ARNG personnel mobilized were found not available for deployment. This rate is similar to the AC's experience during ODS. However, there were cases where units temporarily had high non-availability rates due to dental problems, medical records, immunizations, and so forth. Solving these problems placed some strain on mobilization station operations, although RAND assessments of the support units indicated that these problems were fixed quickly enough so that few if any support units missed their initial planned deployment dates.

PERSONNEL READINESS INITIATIVES

The Bold Shift program undertook three categories of actions to improve personnel readiness in the pilot units.⁶ First, the Army allowed the round-out and round-up brigades and support units in the Contingency Force Pool to receive authorizations for personnel above required strength levels. Second, FORSCOM reinforced existing guidance that DMOSQ and other required schooling in higher-priority units would have priority for available funds. Third, subordinate commands attempted to expedite school attendance by unqualified personnel.

The data available do not permit us to track the detailed implementation of these initiatives. For example, our data do not reflect which individual soldiers in a unit required schooling and whether they attended a qualification course in a given period of time. Furthermore, in our judgment, it is probably too soon to expect these initiatives to have taken hold and to produce important effects. However, we have collected data showing the overall condition of the units at the end of Fiscal Year 1992, which can show the extent to which the personnel

⁵RAND analyses of RC unit readiness reports during the early phase of ODS showed that 11 percent of the support units were classified at a level less than C-3 during their stay at the mobilization station.

⁶These actions are documented in a series of messages and other staff actions (e.g., Forces Command, 1991d, 1992c).

readiness objectives of the above programs were achieved in that year.

Strength and Duty MOS Qualification

A number of the Bold Shift pilot units were authorized to have more personnel than required by the Table of Organization and Equipment (TOE). Both the ARNG and USAR identified priority units, which were to receive special treatment with regard to recruiting priorities, manning levels, and priorities for school slots. Table 3.2 exhibits the authorized and assigned strengths and DMOSQ rates for pilot units during 1992 AT.

Recall that during ODS, estimates for the brigades that were mobilized showed available strength to be above 90 percent and DMOSQ rates between 75 and 80 percent (DAIG, 1991; GAO, 1992b). Thus, these indicators of personnel readiness have not significantly changed since ODS. Evidently, the initiatives to overman the priority units had not yet achieved an effect. This situation was mirrored by the comments we heard in FORSCOM briefings and discussions with unit leaders, who expressed concern about their ability to recruit to the higher levels.⁷

Table 3.2
Authorized Strength, Assigned Strength, and DMOSQ Rates

Unit Type ^a	Authorized as Percent of Required	Assigned as Percent of Required	DMOSQ as Percent of Required
ODS brigades	100	90	77
Non-ODS brigades	101	87	71
Nondivisional support units	95	97	75

^a“ODS brigades” are the three round-out brigades mobilized during Operation Desert Shield. “Non-ODS” are the other three maneuver brigades, which were not mobilized. “Nondivisional support units” are Echelon Above Division and Echelon Above Corps units.

⁷Another factor affecting the rate may be the conversion of several of the battalions from M113 to Bradleys, which require a different MOS (11M rather than 11B). The transition from M113 to Bradley infantryman requires formal schooling, which can take up to two years.

Examining these rates across different types of units, we found only one important variation: The mechanized infantry companies had a DMOSQ rate of 69 percent. They seemed to have the most problems recruiting and sustaining the infantry squad members for the Bradley units.⁸ All the Bold Shift units suffered from similar problems, but the infantry units' problems were the most severe.

Rates of MOS qualification vary widely by grade. They tend to be quite low among very junior personnel, because in the RC new recruits are carried on the unit rolls (and are counted in the MOS qualification statistics) even though they may not yet have attended their initial entry training. This pattern is illustrated in Table 3.3, which was constructed by combining official TAM data on the number of personnel present in the unit (assigned strength) and survey data indicating DMOSQ rates among those personnel who were present.

Note that just over half of authorized positions in the three lowest grades are filled by DMOSQ soldiers. This is to be expected, since new recruits become DMOSQ only after completing basic and MOS training. For most of the grades at E5 and above, the DMOSQ rates fall in the range of 75 to 85 percent. Within these grades, the non-DMOSQ soldiers are those who have switched jobs, or who have transferred into an RC unit from a different specialty in the AC. Over

Table 3.3
Duty MOS Qualification by Grade

Item	Grade						
	E1- E3	E4	E5	E6	E7	E8	E9
Assigned as percent of authorized, from TAM	82	89	99	110	80	89	91
DMOSQ as percent of assigned, from surveys ^a	64	80	84	89	93	94	89
Estimated DMOSQ as percent of authorized	52	72	83	98	75	83	81

^aSee Table 3.4 for numbers of cases on which the survey percentages are based.

⁸This is supported by both the TAM data and reports from officers obtained during visits to units.

time, of course, these non-DMOSQ personnel will attend reclassification schools or otherwise be retrained for their new MOS; but at any given point in time, these data suggest that 15 to 25 percent of the NCO slots will not be filled by qualified personnel.

What can be done to improve this situation? One suggestion might be that the RC units and schools should make greater efforts to send non-DMOSQ personnel to school. To explore the extent of such efforts, the surveys asked whether the respondent was currently attending or scheduled to attend a school for MOS qualification. Table 3.4 shows that many of the non-qualified soldiers did report that they were scheduled for such training. In fact, probably more E1s and E2s have been scheduled than shown here, since many indicated that they did not know their status.⁹

For the more senior grades, however, fewer than half of those needing MOS training were attending or scheduled for school. We do not have full information on the reasons for this or the dynamics of the schooling process, but many constraints may preclude school attendance for an RC soldier. For example, the school system may not have a training seat available during a given period, the unit may not request the training seat soon enough to make a reservation, or the soldier may have a conflict between the time when a seat is available and the demands of his civilian job or family obligations. These data

Table 3.4
Duty MOS Qualification Status and Scheduling for Schooling

Item	Grade								
	E1	E2	E3	E4	E5	E6	E7	E8	E9
Percent DMOSQ	28	70	75	80	84	89	93	94	89
Percent attending or scheduled to attend	51	15	7	5	5	4	3	1	4
Total percent DMOSQ, attending or scheduled	79	85	82	85	89	93	96	95	93
Base number of cases	618	665	1532	6313	4559	2583	876	142	27

⁹From the soldier's perspective, he or she may believe the course has been scheduled when in fact only a request for the course has been placed in the scheduling system.

suggest that whatever the reason, attempts to get soldiers into schools or scheduled for school were not fully successful. But, more fundamentally in our view, the figures in Table 3.4 indicate a large training requirement, driven by MOS reclassification. As we will discuss later, we believe that while the Army should continue to emphasize schooling for these unqualified soldiers, the fundamental issue is reducing the size of the retraining requirement.

Officer Branch Schooling Rates

As we discussed earlier, officers do not have an MOS-specific school requirement to be considered MOS qualified for status-reporting purposes. However, many with whom we discussed this matter indicated that officers are better prepared if they have attended either the Officer Basic Course (OBC) or the Officer Advanced Course (OAC) in the same branch as their assigned duty position. Table 3.5 shows survey data on the percentage of officers who reported that they had completed OBC or OAC in the same branch as their assigned duty position.

Note, first, that the percentage of second lieutenants (O1s) who have completed OBC (76 percent) is in the same range as that seen during ODS (60 to 85 percent of lieutenants). These second lieutenants would not have completed OBC in any other branch and therefore

Table 3.5
Officer Completion Rates for Branch School

Item	Grade					
	O1	O2	O3	O4	O5	O6
Percent with OBC or OAC in same branch	76	85	77	68	61	48
Percent attending or scheduled to attend	14	6	6	2	4	10
Total percent with school, attending, or scheduled	90	91	83	70	65	58
Percent changing branch during career ^a	0	5	25	42	43	40
Base number of cases	248	379	394	145	46	21

^aPercent of those with OBC or OAC in same branch who have also completed OBC or OAC in another branch.

are not MOSQ for status-reporting purposes. However, many of those who have not completed OBC are either attending or are scheduled to attend.

For the other officer grades, the percentage who have completed OBC or OAC in the same branch as their assigned duty position decreases as rank increases. The primary reason is that as promotion opportunities present themselves, officers may need to change branches to take advantage of them. As the fourth row of Table 3.5 shows, many of the more senior officers who have attended OBC or OAC in the same branch as their assigned duty position have also attended in another branch at some point in their career. This career turbulence results in RC officers who may not have branch schooling and experience that would normally be expected for the senior positions they hold.

ATTRITION AND TURBULENCE

The above results indicate that Bold Shift pilot units—the highest-priority units in the RC—have been maintaining DMOSQ rates in the range of 70 to 75 percent (as a fraction of wartime required personnel). Efforts to increase these rates are limited by several interrelated phenomena: (1) RC units experience frequent attrition and job turbulence, which create many vacancies each year; (2) when new personnel are recruited, they are carried on the rolls of the unit even though they may not yet have attended an MOS course; and (3) when units recruit persons who have prior AC or RC service, those soldiers often have experience in a different MOS and must be retrained for their new duty position. Also, RC units frequently have difficulty recruiting personnel from their local market, leaving vacancies that cannot be immediately filled. Since both recruiting requirements and retraining requirements are driven in part by changes in unit personnel, we view attrition and turbulence as fundamental to personnel readiness in the RC.

Table 3.6 shows attrition and turbulence rates as a percentage of assigned personnel. The reported attrition is based on the number of personnel leaving the unit in the quarter preceding annual training. Turbulence includes both personnel who left the unit and those who changed jobs within the unit.

Table 3.6
Attrition and Turbulence in Bold Shift Units

Unit Type	Percent of Personnel Changing per Quarter ^a	
	Attrition ^b	Turbulence ^c
ODS brigades	8.7	15.0
Non-ODS brigades	7.8	14.2
Nondivisional support units	10.3	15.3
Companies within brigades		
Armor companies	6.8	13.8
Infantry companies	10.8	23.1
Field artillery batteries	5.0	10.0

^aFrom TAM reports of annual training.

^bAmong those personnel who were assigned to the unit at the beginning of the quarter, the percent who remained in the same unit at the end of the quarter.

^cAmong those personnel who were assigned to the unit at the beginning of the quarter, the percent who remained in the same unit *and the same position* at the end of the quarter.

The rate of turbulence is almost twice the rate of attrition, with the exception of the support units. This indicates that about the same number of personnel are changing jobs within the unit as are leaving the unit. In any event, these rates reflect a great deal of turnover. While the quarter before AT may not generalize across the full year, if it did, a quarterly turbulence rate of 15 percent would leave just 52 percent of the original personnel remaining in the unit after 12 months.¹⁰

Note, also, that attrition in the infantry companies is significantly higher than in the other type of combat companies. We observed that the DMOSQ rates for these types of companies were lower than for others. The personnel in the lower grades are those most subject to turbulence.

We compared the above attrition rates with those in the Unit Status Reports (USRs) and found that the above rates are higher than the

¹⁰Although apparently quite high, such a rate is not unheard of. Recall that in Chapter Two we found that 61 percent of tank crew commander-gunner combinations had changed over the course of a single year.

annual USR averages.¹¹ In the USRs, the ODS brigades reported 25 percent annual attrition as a percent of assigned, the non-ODS brigades reported 29 percent, and the same support units reported 34 percent. There are two possible explanations for why the rates should differ. First, the rates in the TAM are for company-level units. The USR reports attrition for the battalion and thus would not include people moving between companies within the battalion. In addition, some unit personnel asserted that attrition rates are higher in the quarter before annual training than in the other three quarters of the year. In any case, even if the lower USR rates were correct, such frequent changes place a significant burden on the Army to find and train qualified replacements.

Some of the turbulence may be generated by the RC personnel system itself, which permits or perhaps encourages individuals to move among jobs and units. For example, Table 3.7, taken from previous RAND research, shows the percentage of personnel who moved and stayed over an 15-month period (Buddin and Grissmer, 1994). Not only is attrition high, but a large proportion of RC personnel shift between jobs. Furthermore, as this table indicates, nearly three-

Table 3.7
Job and Unit Changes Among RC Personnel

Stability or Change over a 15-Month Period ^a	Percent of Personnel in Category	
	ARNG	USAR
Same MOS and same unit	62	56
Same MOS and new unit	9	7
New MOS and same unit	8	13
New MOS and new unit	10	16
Left the RC	11	8

^aChanges between June 1986 and September 1987, based on a sample of about 9,900 ARNG and 3,500 USAR personnel (Buddin and Grissmer, 1994).

¹¹Based on 1992 FORSCOM data from SORTS (Status of Resources and Training System, the DoD system that includes USR data).

fourths of the movements that occur within the RC involve a change of MOS.¹²

Of course, some of this turnover is accompanied by a move from one unit to another, and one interpretation is that the soldier may be changing locations because of his civilian job or family situation. Closer inspection, however, has indicated that is not generally the case. Among the personnel shown as changing units in Table 3.7, about two-thirds were moving between two units that were less than 5 miles apart. Therefore, the researchers concluded that most likely they were moving to obtain promotion; in many cases, promotion within the same unit may be blocked because there are no vacancies at the next higher grade, whereas another unit may have such a vacancy. Such unit switching was feasible because RC members had numerous other units nearby. (Ninety percent of soldiers had more than five RC units within 50 miles.) Thus, the soldier seeking opportunities elsewhere often has a large set of alternatives to consider. And in fact, the compensation system encourages such moves, since it offers few if any rewards for remaining in a job at the same grade but does reward promotions.

The average retraining time for RC members who are changing their MOS is between 9 and 10 months (Buddin and Grissmer, 1994). This time varies by job category. Skills for combat jobs take considerably longer (a year or more) to retrain than noncombat skills (6 to 9 months). During this time, DMOSQ rates suffer and time is taken away from unit training unless funds are available to pay for additional duty time and the individual can get additional time off from work and put aside family obligations to attend school.

For the unit that suffers the loss, of course, there is the additional burden of finding and training a new person. If the vacancy is for a junior position, it will probably be filled by a non-prior-service recruit, who may have to wait some time to attend the necessary basic training and MOS course. If the vacancy is for a more senior position, it may well be filled by a soldier with prior service in another

¹²MOS changes are also common among soldiers who move from the AC to the RC. During the 1980s about 60 percent of AC personnel entering RC units took jobs that were different from their active MOS.

unit or in the AC. Since such moves often involve job changes, further retraining is needed.

These patterns suggest that, in effect, the RC system is on a treadmill, in which strenuous efforts to qualify new soldiers are counterbalanced by frequent losses and moves, which generate training requirements anew. Because movement is often necessary to gain promotion, the system may even encourage behavior that drives training requirements up. Thus, the Army bears additional training costs and incurs less-than-optimal rates of individual skill qualification. In addition, the RC experiences absences from AT and loses some of the value of collective training. For these reasons, we concluded it is very important to devise new management methods and incentive or compensation programs to minimize personnel turnover and turbulence.

No one policy is likely to solve the problems outlined here. We suggest two additional options that we believe warrant further examination and, possibly, tests or experiments:

- Develop programs that will encourage units and individuals to behave in ways that conserve experience and enhance readiness. For example, special compensation incentives could be provided to (1) encourage unit members to stay in the same unit and skill; (2) guide RC personnel toward the higher-priority units that can take advantage of their critical skills; and (3) attract more prior-service personnel to RC units that can use their active-duty occupational specialty.
- Recognize that some cross-leveling will be required after a unit is mobilized and plan for it. As the force is drawn down, this will be more difficult, since the active and Individual Ready Reserve (IRR) end-strength available for such purposes will become smaller. However, some peacetime programs, such as IRR affiliate programs, could speed the process and help ensure that the right mix of personnel is available.

Without such changes, it seems unlikely that the RC can reach the ambitious collective training goals that have been set for them.

LEADER TRAINING

Military leaders need a broad range of skills and knowledge, both to meet their individual responsibilities and to train their units. However, the RC faces difficult challenges in developing leaders and maintaining their skills, given the limited time available. RC leaders find it difficult to attend professional development courses that the Army has established (U.S. Army Training Board, 1987), and they tend to have less career experience than their active-duty counterparts (National Defense Research Institute, 1992).

These challenges are especially acute for RC company commanders, who are often geographically separated from their higher headquarters and from AC or RC installations that might provide support. The heavy administrative demands of running an RC unit also leave little time for practicing leadership skills in field or tactical situations. In addition, demands of civilian jobs and families limit the total amount of time that even the most dedicated leader can devote to unit needs or to study of leadership tasks. At higher levels, battalion and brigade commanders and their staffs often do not have either the individual professional education or the level of experience desired for persons in those positions. This chapter describes evidence on the need for leader development in the RC, the status of leader training in the pilot units in 1992, and improvements that should be considered.

NEED FOR LEADER DEVELOPMENT

ODS Mobilization Experience

Observers of ODS agreed that lack of leadership skills was a major problem during the post-mobilization training process, particularly for the combat brigades (DAIG, 1991; GAO, 1991, 1992b; Goldich, 1991; Lippiatt et al., 1992b). The DAIG report concluded that leadership was the brigades' most serious weakness, especially in NCO grades (E6 and above) and field grade officer ranks (O4 and above). It cited needed improvements in technical and tactical competence, control of day-to-day activities, personnel accountability, and the establishment and enforcement of standards and discipline. To achieve these goals, the report urged policies to link NCO promotions to completion of leadership courses, reduce the time to get newly commissioned officers to their Officer Basic Course, improve the selection and training of leaders, and increase stability in leadership positions.

The quality of leadership was not raised as a visible problem for the support units that mobilized and deployed during ODS. By most reports, these support units performed well. That might be explained, in part, by their less demanding operational requirements. Support units are more specialized than maneuver units and generally operate to the rear of the battle. Furthermore, most support units that deployed were single-function formations that depended primarily on individual skills rather than on more complex collective skills. However, another possibility is that leader skills in support units were not tested as rigorously as in the combat units.¹ It is therefore possible that support units, if examined rigorously, would reveal a need for leader training improvements.

The Army made extensive efforts to supplement leader training during the ODS mobilization. For example, the RC brigade and battalion staffs were sent to a collective training version of the Tactical

¹The combat brigades were scrutinized throughout their entire training program. Most support units received more limited readiness validations at their mobilization stations that focused on personnel, equipment, and individual training readiness. Moreover, RC support units had time in theater to work out their plans, to rehearse, and to resolve training problems. For details of the mobilization of support units, see Lippiatt et al. (1992a).

Commanders Development Course (TCDC).² The purpose was to improve officers' ability to synchronize the full combat power of battalions and brigades.³ Parallel efforts were made to improve NCO skills, primarily in exercises during the post-mobilization train-up process.

Two major factors contributed to these leadership problems. First, both the DAIG and the GAO noted that many leaders had not attended the appropriate *professional development courses*. According to the GAO, this problem was exacerbated by a National Guard policy that authorized spot promotions upon unit mobilization for soldiers occupying positions graded higher than their current rank (GAO, 1991). Second, because of time constraints, leaders lacked sufficient opportunity to learn and practice *collective training and leadership skills* during peacetime. Lack of such skills impeded unit training and discipline.

Unit Member Perceptions

Table 4.1 shows the evaluations of the unit members surveyed concerning their leaders' ability to perform wartime missions. Nearly one-fourth of the members were critical of leader effectiveness. Moreover, members of units that were mobilized during ODS were more likely than others to feel that leadership skills needed improvement. Reservists who were mobilized may have had a better view than others of what is required in wartime, and the opportunity to observe their leaders over a more extended period of time.⁴

As one might expect, the commanders and other senior leaders in these units were much less critical, as shown in the lower panel of the table. However, during 1992 the AC evaluators often made direct comments about the need for further RC leader development, echoing the evaluations of the brigades during ODS. In AT evaluations,

²See the discussion of TCDC later in this chapter.

³Synchronization of power is widely regarded as the key to modern warfighting (Department of the Army, Field Manual 100-5, 1993), and many commanders have told us that this is the most difficult doctrinal and leadership task in the Army.

⁴The differences between ODS and non-ODS units is statistically significant at the .01 level, according to a Chi-square test. Among leaders, there was no significant difference between ODS and non-ODS units.

Table 4.1**Ratings of Leaders' Ability to Lead the Unit in Its Wartime Mission**

Respondent Group ^b	Effectiveness Rating (percent of respondents) ^a		
	Extremely or Very Effective	Somewhat Effective	Not Very or Not at All Effective
Unit members	45	32	22
ODS mobilized	41	33	26
Not mobilized	50	32	18
Unit leaders	67	29	4

^aBase number of cases: Leaders, 636; members mobilized, 8,620; members not mobilized, 9,762.

^bUnit leaders are company commanders and first sergeants. Unit members are defined as all other members of the unit.

After Action Reports, and our own interviews, the evaluators spoke highly of RC leaders' dedication and willingness to learn, but saw a need to improve training and supervision skills. In particular they cited a need to plan and execute effective IDT training, to understand and apply the principles of Army training manuals, and to conduct remedial training. These results suggest that RC leader skills constituted a special problem during ODS that persisted into the Bold Shift program year.

LEADER TRAINING INITIATIVES

Leader Qualification

Under Bold Shift, Army and FORSCOM directives emphasized the need to ensure that RC leaders attended courses to qualify them for their leadership position (and if necessary, for their duty MOS). Continental U.S. Armies (CONUSAs) were to coordinate efforts to send leaders to qualification courses. The Adjutant Generals (TAGs) and Major U.S. Army Reserve Commands (MUSARCs) were encouraged to provide funds so that NCOs could attend these courses on additional paid days, permitting them to also attend IDT and annual training with their units. Attendance at a Pre-Command Course before assuming battalion command was also emphasized.

Special Collective Training

As we discussed in Chapter Two, during AT the “leader-teach” portion of the RTC emphasized technical and tactical training of leaders, including After Action Reviews given by observer-controllers. In addition, the Army provided two new courses for groups of leaders drawn from the same unit, to develop RC leaders’ collective training and leadership skills beyond what they would receive in professional development courses.

Unit Leader Battle Skills Course. This two-week course aimed to build unit cohesion, improve technical and tactical proficiency, and improve training skills among junior leaders. It included several variants for different branches, in which attendees were rotated through the leadership positions of squads and platoons while undergoing collective training exercises.

Tactical Commanders Development Course. This 6-day course aimed to improve command and staff synchronization skills for brigade and battalion commanders and staff. It continued the type of training used during the ODS mobilization.

In our view, the most fundamental problem is leader qualification. To perform their duties according to Army doctrine, leaders need exposure to the principles and technical material covered in the Army’s extensive series of professional development courses. Only thereafter are they equipped to further develop their collective skills. Accordingly, we first discuss the qualification problem and progress made toward its solution; then we turn to the additional value that may be contributed by special courses for groups of leaders.

LEADERSHIP QUALIFICATION

In the AC, personnel selected for promotion are routinely assigned to special schools for professional education before assuming their new position. In the RC, however, it is often more difficult to schedule the course or to find time for the person to take it. As a result, the Army has numerous “RC-configured courses” that can generally be com-

pleted in one year or less, including time spent during IDT, AT, and correspondence study.⁵ Below we summarize these requirements.

Leader Course Requirements

Noncommissioned Officer Courses. The primary RC-configured NCO professional development courses are as follows:⁶

Primary Leadership Development Course (PLDC). This two-week resident course provides training in leadership, tactics, Army training methods, and doctrine (not MOS-specific). Completion is required for promotion to E5.⁷

Basic NCO Course (BNCOC). This two-phase course introduces basic skills for NCOs at grades E6 and above. Phase I provides training that is not MOS-specific, which can be taught in either 6 consecutive days or 3 weekends. Phase II contains MOS-specific material usually developed by the proponent schools, taught in a two-week resident mode for most MOSs (some are longer). Completion is a requirement for promotion to E6.⁸

Advanced NCO Course (ANCOC). Like BNCOC, ANCOC is a two-phase course on becoming an effective platoon sergeant or senior section sergeant (E7). Phase I is common leader training that is not MOS-specific but that includes a field training exercise. It can be taught in either 14 consecutive days or 6 weekends. Phase II contains MOS-specific material usually developed by the proponent

⁵Active Guard and Reserve (AGR) personnel, however, must attend the regular AC courses.

⁶See the response from the Office of the Secretary of Defense included in the GAO report on combat training (GAO, 1991). The requirements listed, in some cases, were newly imposed during 1992; in many cases, there are "grandfathering" provisions that waive the requirement for previous cohorts of leaders. For each course listed, the official requirement refers to the RC version of the course (e.g., PLDC-RC).

⁷Before October 1992, PLDC was a requirement for promotion to staff sergeant (E6). It has been available since 1984. As of October 1992 for the Guard and October 1993 for the USAR, it was a requirement for promotion to E5.

⁸Before October 1992, Phase I was a requirement for promotion to E7. Phase II has been available since 1990. As of October 1992 for the Guard and October 1993 for the USAR, completion of the entire course was a requirement for promotion to E6.

schools, taught in a two-week resident mode for most MOSs (some are longer). Completion is a requirement for promotion to E7.⁹

Officer Courses. The primary RC officer professional development courses are as follows:

Officer Basic Course (OBC). This course prepares lieutenants in the basic skills required to perform leadership duties in their branch. The Army aims to have all newly commissioned officers complete OBC through their branch schools. Unlike the other leader development courses, OBC is considered part of initial entry training; therefore, the officer must have completed OBC to be deployable.

Officer Advanced Course (OAC). This course prepares junior officers to be company commanders. RC-configured courses generally have a correspondence phase and a two-week branch-specific phase. The course is required for attendance at CAS3.

Combined Arms and Services Staff School (CAS3). This course trains a captain for staff officer duties in battalion, brigade, and division-level organizations. The RC-configured course has three parts: a correspondence phase, a multiple-weekend phase, and a two-week phase. For captains with a date of rank later than September 1987, this course is a requirement for promotion to major.

Pre-Command Course. This course prepares officers selected for battalion and brigade command. The course has two parts: a one- to two-week portion conducted by the officer's branch, and a one-week portion conducted at Fort Leavenworth, focusing on doctrine and other general topics. For selected command designees (combat unit commanders), the second part also includes the two-week Tactical Commander's Development Program, which teaches synchronization on the battlefield.

Command and General Staff Officer Course (CGSOC). This course trains personnel for duty as staff officers or field grade commanders. The RC-configured course can be taken by correspondence or by attendance in multiple-weekend and two-week phases (for a total of 6

⁹Before October 1992, Phase I was a requirement for promotion to E8. Phase II has been available since 1991. As of October 1992 for the Guard and October 1993 for the USAR, completion of the entire course was a requirement for promotion to E7.

phases). Completion of 50 percent of the course is required for promotion to lieutenant colonel; 100 percent completion is required for promotion to colonel.

Course Completion Rates

Because these courses often require considerable time away from home, RC personnel have not always attended them at the career points prescribed in the active Army. Evidence of this difference was documented by the GAO, which examined the training background of two of the National Guard round-out brigades that were mobilized (but not deployed) during ODS. The GAO compared these two brigades with the AC brigades that were deployed overseas in their place (GAO, 1992b). Table 4.2 shows the results, which suggest significant shortfalls in RC leader preparation.¹⁰

To see whether course completion rates had improved since ODS, we asked RC unit members and leaders about their past course attendance. Table 4.3 gives the NCOES completion rates as reported in

Table 4.2
NCO and Officer Course Completion Rates During ODS
(percent completing course)^a

Grade and Course	Active Component ^b		National Guard ^c	
	Brigade 1	Brigade 2	Brigade 1	Brigade 2
E5s completing PLDC	90	93	28	51
E6s completing BNCOC	90	93	48	61
E7s completing ANCOC	91	94	59	71
O1s completing OBC	100	100	54	86
O3s completing OAC	93	97	51	55
O5s completing CGSOC	100	100	90	100

^aFrom GAO (1992b). Reported base number of cases per brigade: E5, 771 to 1,212; E6, 421 to 756; E7, 203 to 221; O1, 162 to 222; O3, 79 to 121; O5, 8 to 11.

^bAC brigades that replaced Guard brigades as round-outs to divisions.

^cGuard brigades that did not deploy with active divisions.

¹⁰All the differences between AC brigades and National Guard brigades (each pooled), except the comparison for O5s, are statistically significant at the .01 level according to a Chi-square test.

Table 4.3
Percent of Leaders Completing NCOES Courses, by Grade

Course Attended	Grade ^a			
	E4	E5	E6	E7
PLDC: None	74	37		
Completed	26	63		
BNCOC: None		78	39	
Phase I Only		10	27	
Phase II		12	34	
Total, Phase I or II		22	61	
ANCOC: None			78	29
Phase I Only			12	36
Phase II			10	35
Total, Phase I or II			22	71

^aBase number of cases: E4, 6,314; E5, 4,561; E6, 2,589; E7, 913.

the surveys. According to the 1992 surveys, 63 percent of the E5 respondents had completed PLDC. In contrast, the GAO found completion rates of 28 and 51 percent for the two brigades they audited (see Table 4.1). Among E6s, 61 percent of the respondents had completed either Phase I or both phases of BNCOC, which is at the high end of the range of the GAO findings (48 and 61 percent). Similarly, 71 percent of the E7 respondents completed either Phase I or both phases of ANCOC, which is again at the high end of the range of the GAO findings (59 and 71 percent). Of course, some of those counted above actually completed only Phase I of ANCOC and BNCOC and will still need to take Phase II, but at a minimum these personnel have completed half the course.¹¹

Units surveyed in 1992 apparently had a better record of NCOES completion than the limited sample of units for which the GAO provided data, especially in terms of E5s who have completed PLDC.¹²

¹¹Direct comparison is complicated by the fact that NCOES courses and official requirements changed between 1991 and 1992. MOS-specific phases were added to ANCOC and BNCOC courses, and completion of a specific course was required for promotion to a higher grade.

¹²We do not have data on NCOES completion rates for all the pilot units before Bold Shift, so we cannot make a time-series comparison.

However, a substantial fraction of E5s, E6s, and E7s have not completed the course required for their grade.

- 37 percent of E5s have not attended PLDC.
- 39 percent of E6s have not completed any portion of BNCOC, and 27 percent have completed only Phase I but not Phase II.
- 29 percent of E7s have not completed any portion of ANCOC, and 36 percent have completed only Phase I but not Phase II.

Since these courses are designed to prepare NCOs for the positions appropriate to their grade (such as BNCOC for squad leader or ANCOC for platoon sergeant), one may question the ability of these leaders to perform their duties as expected by Army doctrine.

Moreover, shortages in some grades make this problem worse. Positions that are not filled by a soldier in the appropriate grade are typically filled by someone from the next lower grade. For instance, only 80 percent of the authorized E7 slots in 1992 were filled by E7s. The remaining slots were probably filled by E6s, who probably had not attended the course to prepare them to be platoon sergeants. Similarly, in the infantry companies, only 88 percent of the E6 slots were filled by E6s; so the remaining slots were filled by E5s, who may not have had the BNCOC to prepare them to be squad leaders.

These people represent a significant backlog for the schools—and perhaps a larger load than in the past. The load on the schools will depend, in part, on the choices individuals and units make given the recent changes in NCOES requirements for promotion. In the first place, soldiers who are about to be promoted will need to take the course for the next higher grade (even though this was not always necessary under past policies). Furthermore, some of those in the promotion pipeline may not have completed the course for their current grade. If they are selected for promotion, they will have to complete the course required for their current grade before they take the next course, which is also now required for promotion. Given this requirement, some soldiers may be unable to attend school (or choose not to attend), and they may eventually retire or be forced to leave the RC at the grade they currently hold. Therefore, aggregate completion statistics may not rise rapidly in response to policy changes until these soldiers leave the RC.

Historically, many RC commanders have also sent to school soldiers who were eligible for promotion, but who had not yet been selected, thus potentially increasing the schooling requirement. In contrast, the AC follows what is referred to as a “select-school-promote” policy, meaning that a soldier is selected for promotion, sent to school, and then promoted. This policy limits the number attending schools to only those who are to be promoted. In 1992 some RC unit commanders continued their earlier practice, although FORSCOM encouraged the RC to follow the “select-school-promote” policy.

Many reserve commanders believe this situation presents a dilemma. If the commander does not allow school attendance for soldiers who are potentially eligible for promotion (by virtue of time in grade, promotion points, and so forth), these soldiers may believe their future in the RC is limited and may leave the service, creating a retention problem. On the other hand, if the commander allows a larger number to go to school, they are not available for collective training at AT and IDT, and they burden the school system.

While RC unit commanders were not necessarily following the “select-school-promote” policy in 1992, the survey data above do not suggest that the policy has been badly abused. Of those surveyed, only 26 percent of E4s have completed PLDC, 22 percent of E5s have completed Phase I or II of BNCOC, and 22 percent of E6s have completed Phase I or II of ANCOC. Overall, these rates do not seem out of line with promotion rates.

MOS Qualification Among NCOs

A more fundamental problem that affects a minority of NCOs is lack of qualification in their duty MOS. Table 4.4 shows the DMOSQ rate as reported in the surveys, by leadership position of the respondent. Overall, the DMOSQ rates for key leadership positions are reasonably high. Squad leaders (normally E4s and E5s) have a higher DMOSQ rate than E4s and E5s in general.¹³ This suggests that unit commanders are attempting to man key leadership positions with DMOSQ personnel. But what about the 11 to 12 percent of squad leaders, section leaders, and platoon sergeants, and the 6 percent of

¹³See the data on DMOSQ rates by grade in Chapter Three.

Table 4.4
Duty MOS Qualification of NCOs

Leadership Position ^a	Percent Duty MOS Qualified	Percent Not Duty MOS Qualified
First sergeant	94	6
Platoon sergeant	89	11
Section leader	89	11
Squad leader	88	12

^aBase number of cases: first sergeants, 372; platoon sergeants, 471; section leaders, 2,410; squad leaders, 2,814.

first sergeants, who are not DMOSQ? As discussed in the chapter on personnel readiness, this may well be the result of turbulence, as individuals change units and MOSs to qualify for promotion or move for personal reasons. To see how widespread such turbulence might be among NCOs, we examined the data on the length of time that individual leaders had remained in their MOS and their unit.

The upper panel of Table 4.5 shows that the median time in MOS is about 5 years.¹⁴ That is, about half of the leaders have been in their MOS for 5 years or more. Thus, most leaders are not only MOS qualified but have several years experience in their MOS. In fact, as shown by the 75th percentile data, 25 percent of the leaders have been in the same MOS for 9 years or more. However, a significant group has very little MOS experience. Those persons in the lower quartile—meaning 25 percent of the leadership group—have been in their MOS for only 3 years or less. Recall, in addition, that 3 years' experience in an RC unit may include perhaps 120 days of service, or about one-half of a year in the AC.

There is one other possible explanation for why some of the leaders are not DMOSQ or have little time in their MOS. Many of these units have gone through an equipment modernization process over the past few years that has sometimes required a change in duty MOS. For example, all armor units have gone from M60A3 tanks to M1s, a

¹⁴The median is the value for which 50 percent of the sample falls above that value and 50 percent falls below. The upper and lower quartiles are the values that mark the upper 25 percent and lower 25 percent, respectively.

Table 4.5
Time in MOS and Unit, by Leadership Position

Leadership Position ^a	25th Percentile (Lower Quartile)	50th Percentile (Median)	75th Percentile (Upper Quartile)
Years in MOS			
First sergeant	2	4	9
Platoon sergeant	3	5	10
Section leader	3	5	10
Squad leader	3	5	9
Years in Unit			
First sergeant	4	11	19
Platoon sergeant	5	10	16
Section leader	4	8	14
Squad leader	4	7	12

^aBase number of cases: first sergeants, 372; platoon sergeants, 471; section leaders, 2,410; squad leaders, 2,814.

process that requires an MOS change from 19E to 19K. As a result, none of the National Guard leaders in these units have been in their current duty MOS for a long time. Nonetheless, they may have had significant armor experience in the unit.

To see whether experience in the unit revealed a different pattern, we looked at the data shown in the lower panel of Table 4.5. Evidently, most of the RC leaders do have long experience in their particular unit.¹⁵ However, the lower quartile times indicate that 25 percent of the key leaders have had less than 4 to 5 years in the unit, indicating a significant amount of cross-unit movement at the NCO level.

Overall, the presence of 25 percent of NCOs with little MOS experience and 11 to 12 percent lacking DMOSQ presents a sobering picture. These levels probably create a large supervisory and training impact. Moreover, the Army's practice is to decentralize a great deal

¹⁵In fact, many of the RC leaders had more years in their MOS and unit than their AC counterparts. However, this is not to imply that RC time in service is comparable to AC time in terms of developing experience necessary for these leadership positions, especially experience in training troops. In approximately 39 days per year, RC NCOs have to focus more on technical skills and do not get as much time to train troops as do their AC counterparts.

of individual soldier training to the NCO corps. The technical qualification and experience of the NCO are thus crucial to training the troops. NCOs also play key roles in mounting tactical operations and sustaining the unit in the field. The above data, therefore, suggest some fundamental qualification problems have not been solved.

Officer Course Completion Rates

Table 4.6 shows the number of officers by grade who have completed various professional schools, according to the 1992 surveys.

The percentage of O1s who had completed OBC (82 percent) was at the high end of the range found by the GAO when it audited two RC brigades during ODS (54 to 86 percent).¹⁶ In the units surveyed, the rate of OAC completion by O3s (65 percent) is higher than in the brigades (51 to 55 percent). For lieutenant colonels (O5s), however, the rate of CGSOC completion in 1992 is at the low end of the range found in the brigades.¹⁷ Overall, the data indicate that the picture may be better than seen in the two brigades examined by the GAO, but the RC units still have some distance to go to reach goals prescribed by the Army.

Although professional schooling is important for all officers, it is the most important for those who hold key leadership positions. Using

Table 4.6
Officer Professional School Completion by Grade

Grade and Course ^a	Percent Completing Course
O1s completing OBC	82
O3s completing OAC	65
O4s completing CAS3	16
O5s completing CGSOC	89

^aBase number of cases: O1, 248; O3, 394; O4, 145; O5, 46.

¹⁶See Table 4.1.

¹⁷Few O4s had completed CAS3, but it was only recently made a requirement for promotion to that grade.

data from the surveys, Table 4.7 shows the professional school completion rates for leaders in key positions.

The platoon leaders' OBC completion rate was high (91 percent).¹⁸ However, the picture among higher positions was not as good. The fact that the completion rate of company commanders is lower than for all captains (50 versus the 65 percent shown in Table 4.1) suggests that many captains attend OAC after serving as company commanders. However, OAC's primary purpose is to prepare a captain for company command; evidently, then, the basic objective of OAC is being missed.

The 39 percent completion rate for battalion commanders is also striking. This is the Army's only formal RC course that covers branch-specific, battalion-level technical, tactical, and staff functions. It therefore seems likely that RC unit functioning would improve if more commanders received formal training in these areas.

In addition to taking the courses appropriate for one's leadership position, leaders also need branch schooling and experience. The middle column of Table 4.8 shows the completion rates of schools in the same branch as the leader's current duty position. These data show that a higher percentage of officers in key leadership positions have completed a school in the same branch as their current duty

Table 4.7
School Completion Rates for Leaders in Key Positions

Leader Position and Professional Course ^a	Percent Completion
Platoon leaders completing OBC	91
Company commanders completing OAC	50
Battalion commanders completing pre-command course ^b	39

^aBase number of cases: platoon leaders, 443; company commanders, 229; battalion commanders, 34.

^bIncluding TRADOC or locally conducted pre-command courses.

¹⁸Note, however, that the remaining 9 percent have not completed a course considered a prerequisite for assignment of an officer to a TOE unit. Moreover, those personnel could not be deployed until they complete OBC (unless they are prior-service personnel).

Table 4.8
Branch School Completion Rates for Leaders in Key Positions

Leader Position ^a	Percent Completing OBC or OAC in Same Branch as Current Duty Position	Percent Completing OBC or OAC in Same Branch and a Course in Another Branch
Platoon leader	84	2
Company commander	85	16
Battalion commander	67	30
Brigade commander	63	40
Battalion and brigade staff	67	49

^aBase number of cases: platoon leader, 443; company commander, 229; battalion commander, 34; brigade commander, 8; battalion and brigade staff, 220.

position than officers in general. But there is a significant number of officers in key positions with no in-branch schooling experience, especially in the higher ranks.

A primary reason for this problem is turbulence, discussed in the chapter on personnel readiness. The right-hand column on Table 4.7 shows the percentage of officers in key positions who have completed at least one branch school but have also attended a school from another branch. At the more senior levels, these rates approach 50 percent. These numbers no doubt include many staff officers who have changed branches. Since there are few opportunities for RC officers to obtain and practice staff skills in their branch, this indicates that many staff officers may not have the background and experience needed to assist their commander in synchronizing combat power and support.

Methods for Improving Leader Qualification

Based on our review of the evidence above, it appears that rates of leader qualification are improving but still fall substantially short of the Army's goals. We suggest three areas where continued or increased emphasis may help to solve this problem.

First, the RC chain of command needs to place increased emphasis on professional education. Continued emphasis from FORSCOM and Army oversight organizations is needed to ensure that this func-

tion receives priority and that leaders in the field understand that future promotion will depend on completion of essential professional training.

Second, the Army should provide more funds for additional duty for training (ADT) for leaders in high-priority units. ADT is important because it permits people to attend courses without taking them away from AT or IDT. However, this may require reallocation to provide scarce ADT funds to people in the most critical slots.

Third, the AC and RC school systems need to ensure that training seats for these essential slots are available to RC leaders. Currently, it is widely perceived that school seats are often not available on a schedule that permits RC personnel to attend. To minimize the burden on the school system, the Army should also regulate the scheduling of individuals so that units request schooling for the most critical individual leaders and that they adhere to the “select-school-promote” sequence for training.

COLLECTIVE LEADER TRAINING INITIATIVES

Critiques of RC leadership during ODS concerned not only formal professional education but also technical, tactical, and broader leadership skills. Here we discuss the two special courses that were instituted during Bold Shift to build upon individual qualifications of leaders and to hone their collective skills.¹⁹

Unit Leader Battle Skills Course (ULBSC)

The Unit Leader Battle Skills Course (ULBSC) was a two-week course for NCOs and officers of a unit (normally a company) to improve junior leadership skills. Five different courses were developed by different branch proponent schools.

¹⁹One other initiative bearing on leader skills, as discussed in Chapter Two, was the Reserve Training Concept's (RTC's) emphasis on graduated training and rehearsals of leaders with After Action Reviews before the lanes were executed with troops. As we noted there, the value of RTC leader training was confirmed by our observations, interviews with AC and RC personnel, and the survey results.

- *Infantry* (7 companies). This two-week version of the Infantry Leader Course trained primarily dismounted skills in a field setting. It included day and night operations and kept the platoons in the field continuously for almost the entire two weeks.
- *Engineer* (2 companies). A version of the “sapper” course for AC companies, this was similar to the infantry course but based on the dismounted light engineer platoon.
- *Armor* (8 companies). Simulation- and classroom-based, this course first trained gunnery and equipment skills, making extensive use of the Conduct of Fire Trainer (a single-tank gunnery simulator). It then developed tactics using classroom and sand-box exercises and SIMNET (a tactical training simulation with multiple-tank formations).
- *Maintenance* (2 companies). A course for light equipment maintenance companies, this concentrated on technical skills and classroom training. Each leader operated in each of the companies’ sections (e.g., supply, electrical repair, power generation).
- *Medical* (1 company). A course for an infantry brigade’s forward medical company conducted at a Regional Training Site, Medical. The entire unit participated, with enlisted soldiers receiving technical training and the unit undergoing a field training exercise.

The survey results showed that the leaders who attended the above courses considered them quite effective. Of those attending, 87 percent agreed that ULBSC was the type of course their unit needed to train leaders to perform individual and collective pre-mobilization training. Only 4 percent of the respondents recommended that the course not be continued. All others thought the course should either be continued in its present form or be developed in an exportable form. Over 90 percent of the respondents were positive about all aspects of the course, including such aspects as the knowledge and skills learned, content of the curriculum, and quality of the instructors.

Table 4.9 exhibits respondents’ recommendations for future ULBSCs. Nearly 80 percent believed it was important to send the unit’s leaders together as a group (not as a composite unit with other

Table 4.9

Respondents' Recommendations for the Unit Leader Battle Skills Course

Recommendation	Percent of Respondents ^a		
	Agree	Unsure	Disagree
Leaders should attend ULBSC with their unit, not with a composite unit	78	8	14
Units should attend ULBSC even in place of attending AT	62	12	26

^aBased on 181 respondents.

leaders), and more than 60 percent thought the material was so important that they would prefer to attend the course even if it precluded participating in AT. Debriefings of participants confirmed these survey results. The participants reported that the course improved both their personal skills and knowledge and their leadership's cohesion. There was consensus that having the unit's leaders train together without the entire unit was helpful, because it allowed time to learn to work together and achieve consensus on how to train the unit.

However, as we heard again in this context, it is difficult to obtain an RC unit's full participation when course attendance requires more time away from home. And in our judgment it would be unwise to detract from AT to continue this type of course. To ensure unit integrity but avoid adding new burdens to the personnel, we recommend instead that the material from ULBSC be adapted and integrated into NCOES. This would require additional support from Army Training and Doctrine Command (TRADOC) schools, but the burden would probably be less than mounting one-of-a-kind courses and bringing the leaders to them for a special activity.

Tactical Commanders Development Course

The special "collective" TCDC course conducted during 1992 aimed to improve the skills of commanders and staffs at the battalion and brigade level. During this course, the brigade commander, his staff, and the field artillery and forward support battalion commanders trained together. Each of the three maneuver battalion command-

ers, their staffs, and company commanders were trained as separate groups. Using an approach similar to that for platoons, the course taught individual skills first; then walked leaders through an exercise; and finally developed, rehearsed, and executed an offensive operation in a computer-assisted map exercise.

The survey results suggested that TCDC made a positive contribution. For example, on the content of the curriculum, the knowledge and skills learned, and the improvement in their unit's ability to perform its wartime mission, 95 percent of the 71 survey respondents rated the course as good or very good. More than 90 percent recommended that other units receive it. As shown in Table 4.10, respondents also agreed it was critical that unit leaders attend the course as a unit. However, only 35 percent felt that TCDC should be held in place of attending a regular AT period. These results were backed up by debriefing interviews, in which the participants endorsed the program as beneficial to training readiness and urged that it be conducted each year in addition to AT and expanded to other units.

The participants seemed to be saying that the TCDC experience, while very valuable, is likely to interfere with other important collective training unless it is conducted separately from AT. In this case, unlike that of the junior leaders, we believe that many battalion and brigade officers would be able to attend a special TCDC session in addition to AT. One approach might be to bring these officers to AT early to cover some of the material in the TCDC curriculum. Since there are relatively few such personnel in high-priority units, it

Table 4.10

**Respondents' Recommendations for the Tactical Commanders
Development Course**

Recommendation	Percent of Respondents ^a		
	Agree	Unsure	Disagree
Leaders should attend TCDC with their unit, not with a composite unit	90	4	6
Units should attend TCDC even in place of attending AT	35	4	61

^aBased on 71 respondents.

should be feasible for the Army to provide ADT funds to support their additional time, thus permitting them to get both AT and TCDC experience during the year.

MONTHLY DRILL TRAINING

Monthly drills, called inactive duty training (IDT), represent 24 of the 38 or 39 training days per year available to an RC unit. The Bold Shift strategy expected that IDT would focus on training individual, leader, and lower-echelon collective tasks, in preparation for an AT period in which the unit would achieve its collective pre-mobilization goals. To carry out such a strategy, effective use of IDT weekends is essential. Conversely, an ineffective IDT program will make the AT period less productive and will lower unit readiness. Ineffective IDT may also affect personnel readiness. For example, studies of retention have shown that dissatisfaction with IDT is a significant reason for soldiers leaving local units (U.S. Army Reserve Command, 1992).

This chapter describes recent experience with IDT, reviews participants' perceptions of strengths and weaknesses during the 1992 program, and draws inferences about how IDT could be improved in the future.

Because of the need to schedule equipment utilization, training areas, and other resources with long lead times, IDT schedules are set a year or more in advance. Therefore, the Bold Shift program did not have much impact on the form of IDT training during the first year. The main effect on IDT in 1992 was in the general guidance for units to refocus training on lower-echelon functions leading up to crew, platoon, and company activities at AT.

Two of the six active divisions sponsoring Bold Shift brigades reported little or no cost for supporting IDT.¹ Much of the support that did occur was in the form of "mobile training team" visits to IDT by groups of 1 to 5 active soldiers (although there were instances where up to 100 AC personnel were involved in supporting RC gunnery). For the four divisions that reported some IDT support activity, the average amount of AC support was about 1,400 man-days per brigade. Among RC support units, about two-thirds received some AC support at IDT, averaging 83 man-days per RC unit. Although we do not have much systematic data on IDT in 1992, the scale of the effort and our informal conversations with AC and RC leaders made it clear that most IDT drills were basically unaffected by the new program.

RATING OF IDT EFFECTIVENESS

Table 5.1 shows how the members and leaders of RC units rated the overall effectiveness of IDT and AT in preparing their unit for its wartime mission. Note that both the leaders and the members rated AT more positively than IDT. Of the members responding, 62 percent rated IDT as "somewhat" to "not at all" effective, compared with 45 percent for AT. Of leaders, the respective ratings were 53 percent and 26 percent. Thus, over half of the respondents rated IDT as at

Table 5.1
Comparison of IDT and AT Effectiveness Ratings
(percent of respondents)^a

Effectiveness Rating	Members		Leaders	
	IDT	AT	IDT	AT
Extremely Effective	9	16	9	27
Very Effective	28	39	39	47
Somewhat Effective	43	32	46	22
Not Very Effective	13	8	6	3
Not At All Effective	6	5	1	1

^aBase number of cases: members, 17,827; leaders, 645.

¹See the summary of costs of AC support in Appendix C.

best only somewhat effective. In addition, our informal discussions with RC leaders and the feedback from AC and RC AARs strongly indicated that IDT is a weak area of RC training.

IDT PROBLEMS AND POTENTIAL IMPROVEMENTS

Conducting effective IDT training is, in many ways, much more difficult than providing good training at AT. AT generally has a single start-up and break-down requirement, and the contiguous 14-day training period permits training on more tasks with higher levels of skill retention. IDT, on the other hand, is normally conducted on one two-day weekend a month. The need to set up and break down training sites and equipment consumes time in each IDT weekend, and learning decay occurs from one month to the next.

To suggest the reasons why IDT is perceived as less than fully effective and to suggest potential improvements, the surveys asked unit members and leaders to rate the value of possible changes. Respondents were asked to select, from a long list of potential improvements, the "top 3" changes that they would make in IDT. Table 5.2 summarizes the selections that resulted.²

The responses from unit leaders included virtually the same items, except that leaders placed "more full time support" near the top of their list. Not surprisingly, leaders in maneuver units emphasized the need for increased time on ranges and maneuver areas, and bat-

Table 5.2

Potential Improvements in IDT: Ratings of Unit Members

Item	Percent Selecting Item Among Top 3 Choices ^a
More equipment available for training	42
Better planning and preparation for drills	36
More effective use of training time	35
More time for individual skill training	35
Better coordination during drills	30

^aBase number of cases: 7,970.

²See Appendix B for the complete list of options and details of these results.

talion and brigade staffs saw benefit in more ADT for command and staff training.³

The top-rated item in Table 5.2 ("more equipment available") reflects a theme that we have heard time and again in our conversations and visits with RC personnel. Access to equipment and training areas is particularly problematic in the RC because units are scattered across many communities. Sometimes few if any tactical vehicles are located at the unit's site, and suitable maneuver areas are often far away. Thus, collective training may be virtually impossible, and individual training can lack "hands-on" realism.

A second notable aspect of these ratings is their focus on time utilization, especially the efficient use of scarce training time. Three of the five items above ("better planning," "more effective use of training time," and "better coordination") explicitly express the need to make IDT drill periods more productive. Only the desire to have more equipment available for training relates directly to a resource constraint (other than time). These results are consistent with interviews we conducted with AC and RC commanders and soldiers during the 1992 training year. Below we suggest possible mechanisms for achieving these goals and the mechanisms' feasibility.

METHODS FOR IMPROVING IDT

Improving Access to Equipment

Units with extensive amounts of heavy equipment, such as tracked vehicles and heavy engineer equipment, normally have only small inventories at armories and drill centers. It is often not possible to store the unit's equipment at local sites because of the size and nature of the facility required. Instead, equipment is frequently stored at the AT site, a practice that also avoids costs for moving items back and forth between the unit's home station and the AT site. In addition, units such as maintenance companies, which need equipment from other units for training, normally will not have these at their drill centers and armories. Indeed, even if equipment is present lo-

³See Appendix B for results for unit leaders. The top five or six items varied only slightly across unit types or levels of leadership.

cally, the normal usage patterns may not generate many “broken” parts that are suitable for maintenance training. These limitations on the amount of local equipment impede individual training, more so for IDT than for AT.

It would not be easy to increase the availability of equipment, facilities, local training areas, and training devices. One solution has been to establish local training areas with equipment and training facilities to serve several units. During Bold Shift, we noted that a tank battalion that had one of the best gunnery results used a local gunnery facility extensively during IDT. The National Guard Bureau has suggested an initiative to establish Platoon Training Areas to improve IDT training for combat and combat support units. Local training areas near the unit’s drill center or armory would facilitate training and minimize travel time. Experience has shown, for example, that if the unit must travel over 200 miles, more than half of an IDT period can be used by travel to and from a training site.

Another approach, which might be attractive for maneuver units, would be to fly the unit members from their home station to a training area that stocks appropriate equipment, using either dedicated or commercial air transport. Much of the time and difficulty of moving units is derived from the laborious process of surface transit. The costs, while not trivial, could be held down by doing this only for high-priority units and only a few times during a training year.

In general, however, we are not optimistic that such changes would prove feasible on a wide scale. Nor are they likely to greatly improve training unless something is done to meet the other primary impediment to training—utilization of time.

Effective Use of Time During IDT

In our view, the most important constraint on IDT is the limited time available. Not only is the time limited to 2 days per month, but also the available drill time is consumed by administrative activities rather than training. The amount of effective training time available during IDT is much less than one might expect from 24 days per year. AARs and discussions with AC and RC leaders indicate that much of the IDT available time is spent on administration, preparation for movement to AT, and recovery after AT. Table 5.3 depicts a hypo-

thetical drill schedule portraying the demands that compete for time against collective training events. While all units might not experience this particular chain of events, this sequence does illustrate the major activities during the 12 IDT weekends and their potential effects on the effective time available for training.

Note how many activities must be accomplished during IDT. If a unit is scheduled for an inspection or an Operational Readiness Exercise, for example, that would take at least one more weekend. In some cases, the unit might spend an additional weekend preparing for the inspection. Retention surveys conducted by the USAR from 1988 to 1991 show that over half of junior enlisted soldiers reported that half or less of IDT time was devoted to training (U.S. Army Reserve Command, 1992). When the unit does go to a training area or range, the time for travel and for drawing and turning in equipment can consume up to half of a weekend training period.

RC units also have more administrative requirements than AC units. For example, many personnel management functions are handled at the company level in the RC, whereas in the AC they are handled centrally. Mandatory inspections and preparation for inspections also dilute available training time. These requirements divert leaders' training focus—especially where command emphasis,

Table 5.3
IDT Activities

Month	Activity
1	Prepare equipment, etc., for AT
2	Travel to and from AT
3	Recover from AT
4	Common task training
5	Physical fitness testing
6	Preparation for individual marksmanship qualification
7	Individual weapon qualification
8	Admin/state mission training
9	Available for collective training
10	Available for collective training
11	Available for collective training
12	Available for collective training

followed up by inspections, places a priority on successful completion of administrative tasks.

As discussed above, three of the top four improvements that unit personnel recommended were related to better planning, coordination, and use of time during IDT. Extensive planning and coordination are needed to conduct effective individual, leader, and lower-echelon collective training during IDT. The Army's preference is for hands-on, performance-oriented training conducted in small groups. This method requires equipment and well-prepared trainers. Large-group classroom training, which is easier to conduct and requires less advance preparation and coordination, is suitable only for orientation and similar subjects.

RC units have limited capabilities and resources to plan and prepare for IDT. Most companies have at most a single full-time trainer. Other support could be provided by increasing full-time support, by outside organizations, or by providing ADT funds for planning and preparation by drill unit members. Resources to expand these functions could permit more effective use of IDT time by setting up training sites and preparing trainers before drill periods.

FULL-TIME SUPPORT

Because full-time support (FTS) personnel could play an important role in making IDT more efficient, it is useful to consider their characteristics in more detail. As noted above, unit leaders identified more FTS for the unit as one of the top choices for improving the effectiveness of IDT. FTS personnel in the RC serve in a number of areas.⁴ Our concern here is only for the full-time personnel who directly support RC units, many of whom serve in those same units.

Shortages of Full-Time Support Personnel

As shown in Table 5.4, the Army RC had a stated requirement for about 69,000 FTS personnel directly supporting units in 1990.

⁴See Office of the Assistant Secretary of Defense for Reserve Affairs (1990) for a discussion of the overall FTS program in the DoD RC.

Table 5.4
Full-Time Support in the ARNG and USAR (FY 1990)

Component	Programmed	Required	Programmed as Percent of Required
ARNG	25,236	34,496	73
USAR	13,383	34,897	38
Total Army RC	38,619	69,393	56

SOURCE: Office of the Assistant Secretary of Defense for Reserve Affairs (1990).

However, less than 60 percent of these slots were filled, with particular shortages evident in the USAR.⁵

These shortages were evidently felt by Bold Shift unit commanders, even though their units were slated as high-priority units by the Army. The survey asked unit leaders (primarily company commanders and first sergeants) if their unit had a sufficient number of FTS personnel "to focus on wartime training" during IDT and AT. As Table 5.5 shows, 53 percent said that they had an insufficient number of FTS personnel; another 29 percent hedged by responding that the number was "somewhat sufficient." Only 18 percent indicated that they had sufficient FTS. On the other hand, the unit leaders were generally satisfied with the quality of the FTS people that they did have; when asked in the survey, only 6 percent responded that they were "somewhat dissatisfied" or "very dissatisfied" with their own FTS personnel.⁶

To quantify the scale of FTS needs, the survey also asked the RC unit leaders (a) the number of FTS personnel actually assigned to their

⁵See Brauner and Gotz (1991) for a discussion of how the requirements for FTS personnel are determined.

⁶The survey data also indicated that most FTS personnel are MOS qualified. For example, among Active Guard and Reserve (AGR) personnel (a key group), 86 percent had been officially awarded the MOS for their duty position. However, like other unit members, about one-third of AGRs lacked the appropriate leader course for their grade (e.g., 34 percent of E5s had not attended the PLDC course, and 29 percent of E6s had not attended either Phase I or II of the BNCOC course). These shortfalls seem correctable for personnel who are dedicated full-time to the RC.

Table 5.5
Perceived Sufficiency of the Number of FTS Personnel
(reports of unit leaders)^a

Sufficiency of FTS Personnel	Percent of Respondents
Sufficient	18
Somewhat sufficient	29
Insufficient	53

^aBase number of cases: 625 leaders.

unit, and (b) the additional FTS they would need to support training. Table 5.6 shows the number assigned and the total number required, according to the unit leaders in line companies (excluding headquarters companies for battalions and brigades). On average, line companies, whether combat or support, had about 4 FTS personnel. However, they indicated that they really needed on the order of 5 to 7 persons per company. The results are generally consistent with the official data for the entire RC, indicating that even high-priority units were manned at about two-thirds of the required FTS personnel.

Because of the shortages, many units told us that the time of FTS personnel was occupied primarily by administrative and other day-to-day tasks, leaving little time to plan and prepare for training. Table 5.7 provides some support for those perceptions. It shows the proportion of time spent by FTS personnel in various tasks, according to the unit leaders responding to the survey. On average, FTS personnel spend half of their time on administrative tasks, and only one-fourth on training management. Previous RAND research has

Table 5.6
FTS Personnel Assigned in Company-Size Units
(reports of unit leaders)^a

Company Type	Number Assigned	Number Required	Assigned as Percent of Required
Combat	3.6	5.3	68
Support	4.4	7.0	63

^aBase number of cases: 625 leaders.

Table 5.7
Activities of FTS Personnel in Units

Task	Percent of Time Spent (Median) ^a
Administration	50
Equipment maintenance	10
Training management	25
Conducting training	10
Other	5

^aBase number of cases: 625 leaders.

also documented the importance of administrative activities and the time they can consume, both on commanders' and unit members' schedules (Brauner and Gotz, 1991). Many administrative tasks—such as payroll, personnel record-keeping, and testing and qualification—are perceived as urgent and are readily audited; thus, it is likely that the administrative needs are served first, while training (especially planning future training) is left at the end of the list and often is never accomplished. We conclude that if more FTS personnel were available, they would be available to better prepare for training events and thereby strengthen the training element of IDT.

FORMULATING AN EFFECTIVE IDT STRATEGY

From the above, it seems clear that there is no single means for making significant improvements in the effectiveness of IDT. Removing administrative requirements to make more time available for training will improve effectiveness only if the time is filled with effective training. Yet good training is unlikely to ensue unless something is done to improve planning and preparation for drills. It is probably unrealistic to expect part-time company commanders, who are located in dispersed areas sometimes far from other Army institutions, to develop innovative and effective training plans. What is needed is a set of models, like the "lanes training" plans that were developed by AC trainers and used successfully in the 1992 AT programs, along with the resources and people to adapt and execute them under local conditions. Thus, we suggest an approach like the following as an avenue toward more effective IDT.

Reductions in Administrative Requirements. The Army needs to identify those current activities that could be forgone to make time available for more meaningful and effective training.⁷

Effective Training Packages. Model training packages, such as lane training guides developed at FORSCOM for Bold Shift, could be developed for specific types of units. These might fulfill a role similar to "programs of instruction" published by the Army for individual courses, except they should allow more flexibility. Such packages should be developed recognizing that units using the packages will differ widely but that all will face limited access to training aids and resources.

Distribution Mechanism for Training Concepts. A formal mechanism is needed, in TRADOC or the reserve training establishment, to collect and distribute training packages, lessons learned, and other "training good ideas." Currently, the process of training development for lane training is so decentralized that solutions to similar problems must often be re-invented for each unit (a process that we observed in the brigades during Bold Shift).

Full-Time Support. Additional full-time support is a key element in better planning and preparation for IDT and in making more efficient use of time. Many units face unique circumstances in the availability of resources and steps needed to obtain resources that are missing. Only full-time personnel have the time to tailor generic training packages to the particular unit, to prepare the specific training plan, and to arrange and coordinate necessary resources. Full-time support can also relieve unit leaders of many administrative tasks so unit leaders can concentrate on their own self-development and on overall preparation of the unit for a wartime mission.

⁷As noted in Appendix A on the Operational Readiness Evaluation, there is a clear need to consolidate or eliminate multiple inspections directed by different commands overseeing the RC. Over the long term, more efficient and centralized pay and personnel systems would eliminate many requirements that now occupy valuable drill time.

OBSERVATIONS AND CONCLUSIONS

In 1992 the Bold Shift program was instituted to resolve problems limiting the readiness of the Army's highest-priority RC units. The program's initial implementation was successful in many dimensions. There was widespread acceptance of its concepts and most of its features, in both the active and reserve communities. The main features of the intervention seemed to be headed in the right direction and well worth continuing. Among these successes we count particularly the following:

- Training to more realistically attainable pre-mobilization goals
- Lane training, careful After Action Reviews, graduated build-up of skills for reserve leaders, and other features of the Reserve Training Concept
- Closer ties between the active and reserve components.

A summary indication of the response to Bold Shift can be seen in the overall evaluative comments we received from unit members in both surveys and one-on-one conversations in the field. A large majority of pilot unit members (84 percent of those surveyed) regarded Bold Shift as effective in improving their unit's readiness for its wartime mission. Over 90 percent of the unit leaders declared that Bold Shift should be continued in their unit, and over 80 percent indicated it should be expanded to other units.

While successful in concept and features, the Bold Shift 1992 program was not able to bring the units to their pre-mobilization training and readiness goals. Results from 1992 suggest that the pre-

mobilization goals for combat support and combat service support units may be attainable if continued improvements can be made. The results for combat units appear less optimistic. Even after refocusing training effort on the lower echelons, the combat units needed training on a large number of crew and platoon tasks, both gunnery and maneuver. Given their limited opportunity to train in the field with their vehicles, they face a difficult job in developing and sustaining skills. Perhaps most important, their collective training is impeded by the need to send numerous individuals to MOS and leadership courses, just to get their personnel qualified for their duty positions.

Personnel readiness—having sufficient trained and deployable personnel—constitutes the largest single challenge to improving RC readiness. In many ways, it is a linchpin, and failure to resolve problems may preclude advances in a number of other areas. Attrition and turbulence among unit members and difficulty in recruiting to authorized levels both reduce the number of trained personnel available. Losing a trained member, or switching a soldier trained in one skill to another for which he or she must be retrained, has a particularly corrosive effect. Not only must the individual be retrained in a new skill, in which it may take years to attain individual proficiency, but the unit's ability to conduct effective collective training is also inhibited. Attrition and turbulence among tank crewmen, for example, are probably the main causes of low rates of crew qualification and the inability of units to sustain the required number of trained crews.

Up to now, the Army has attacked the personnel readiness problem by attempting to send more soldiers to qualification schools and focusing school resources on the highest-priority units and individuals who need training. Many soldiers in our surveys reported that they would be willing to spend additional time attending school if compensated by "additional duty for training." That approach would preserve their time to participate in regular collective training. With continued effort and attention, such policies may succeed in working through the current backlog of soldiers who need individual training. However, something should also be done to attack the root problems of high turbulence and attrition. To that end, we recommend development and testing of new incentives and personnel policies to keep trained individuals in their job, in their unit, and in the RC.

Shortfalls in leader qualification and experience constitute a similar set of problems. We have seen that about one-third of NCOs in the Bold Shift units had not attended the formal courses required for their leadership positions. Among officers, similar shortfalls existed; for example, about half of company commanders had not attended the qualifying course for their command position, and many officers had been trained in a different branch from the one where they were serving. Through Bold Shift, the Army made strenuous efforts to improve leader tactical and command skills—for instance, in the special exercises and collective training opportunities offered during 1992. However, we believe such efforts are largely swimming upstream as long as many leaders lack basic background courses and branch experience. While incentives to reduce turnover would surely improve the situation, it is also necessary to confront the leader qualification issue by requiring background courses for promotion, paying for extra duty days to attend, and ensuring that those who are promoted receive highest priority to get the course on time. Even so, this may take a long time, because there is a considerable backlog to work off.

Improving the effectiveness of IDT is the other primary challenge for RC training. Given that IDT represents more than half the training days available to an RC unit, it is important to get the most out of it. None of the identified impediments will yield easily to solution. One approach could be to relieve unit commanders of routine administrative responsibilities by arranging for those functions to be performed at a higher echelon, as is done in the AC. More full-time support might provide considerable leverage by freeing RC leaders to concentrate on training planning and execution. An often-heard rule of thumb suggests that for any training exercise, 70 percent of the effort goes into preparation and 30 percent into execution. Thus, to efficiently use the most scarce commodity in a unit—drill time for the M-Day soldier—it may be wise to invest in full-time support, or other outside assistance, to make more efficient use of IDT time. This might not necessarily involve budget increases; existing full-time support resources might be reallocated, over time, to the high-priority RC units whose training demands are the greatest. We also suggest the Army might encourage the development of “training packages,” similar to the lane training guides developed in Bold Shift

for AT, that could serve as a model for IDT planners and could be adapted to local situations where resources are quite limited.

The other primary impediment to efficient IDT is lack of local equipment and collective training areas. Given the dispersion of RC units and their distance from training areas, new approaches should be explored if the units are to be held to the current pre-mobilization proficiency goals. For example, it might be more efficient to fly unit members to training sites several times a year or to provide more local simulation capability. Since such initiatives could involve major investments, the Army should consider mounting more pilot programs and structured experiments to assess the costs and payoffs.

Overall, future programs need to bear in mind two features of reserve experience: the need for *stability* in personnel and *efficiency* in use of soldiers' time. We have been struck repeatedly at how heavy a burden the current reserve system places on the acquisition and sustainment of difficult soldier skills. Given the basic features of reserve service—modest amounts of training time, split into infrequent training periods—there is every opportunity for skills to atrophy and changes in personnel to disrupt relationships that are essential to collective proficiency and unit cohesion. To overcome these challenges, the reserve forces need an environment of more stability and more efficiency to allow individual skills to mature and groups of individuals to grow into capable fighting forces.

Appendix A

OPERATIONAL READINESS EVALUATION

As a result of the ODS experience, both the Army Inspector General and the General Accounting Office pointed to the need for better assessments of RC unit readiness (DAIG, 1991; GAO, 1991). Previous assessment methods, including regular Unit Status Reports, had produced optimistic readiness expectations that were not borne out after mobilization.¹ These problems impeded unit preparation, contributed to inefficiencies in the post-mobilization process, and led to delays in the train-up of the units.

One mechanism intended to improve readiness assessments was the Operational Readiness Evaluation (ORE).² The ORE was developed as a special activity under Bold Shift and was administered to both active and reserve component units on a very limited test basis in 1992. This appendix describes the OREs and the reactions of the RC leaders whose units received them.

THE ORE PROGRAM

In 1992 the ORE was established as a pilot program under a test regulation (Forces Command, 1992b). Broadly, it aimed to provide the following:

¹For details on previous assessment methods, see Department of the Army, AR 220-1 (1991b), and Forces Command, *IR Status Report* (1985).

²At various times the program was named Emergency Deployment Readiness Exercise, Operational Readiness Exercise, and finally Operational Readiness Evaluation (ORE).

- A “motivational training and assessment exercise” for selected companies and detachments
- An assessment of unit readiness in critical training tasks, personnel qualifications, equipment maintenance, and administrative preparation for mobilization and deployment.³

The ORE was similar to and patterned after the Operational Readiness Inspection conducted by the Air Force and the Emergency Deployment Readiness Exercise conducted by Army AC organizations. Special ORE teams were formed at each of the four regional Continental U.S. Armies (CONUSAs), which are partly responsible for overseeing RC units. Each ORE team included members drawn from the AC, the Army National Guard (ARNG), and the U.S. Army Reserve (USAR). Team members provided expertise to evaluate common unit functions, and were augmented by subject matter experts, equipment, and other personnel from the states, AC corps, and various organizations in the RC chain of command.

Members of each CONUSA team visited selected units in their region to conduct OREs beginning in March 1992. By the end of the pilot year (September 1992), 59 RC units and 10 AC units had received OREs.

Each ORE was conducted in two parts: a compliance phase and a training phase.

ORE Compliance Phase

This was primarily a records and logistics inspection. Usually it was conducted during the week and involved only full-time personnel and key unit leaders. It included inspection of records in three areas:

- *Personnel.* Items such as medical records, dental records, life insurance, family support plans, identification cards, and wills; that is, those items that are essential to be ready to deploy.

³Numerous other secondary benefits were anticipated from the ORE, such as providing a cross-check for Unit Status Reports and identifying resourcing shortfalls and systematic problems that could only be rectified by echelons above the unit. However, we regard the two items listed above as the central aims of the ORE.

- *Training management.* The unit's training management system, including records of the Army physical fitness test, common task test, and gunnery and marksmanship results.
- *Logistics.* Maintenance training and support, equipment availability, unit property records, status of scheduled maintenance services, and the adequacy of supplies needed for deployment.

ORE Training Phase

This phase was conducted when the unit's troops were present, normally during an IDT weekend drill period, although sometimes it was done during AT. It included the following:

- *Physical fitness.* Administration of the Army physical fitness test to unit members.
- *Individual task proficiency.* A test of unit members' ability to perform common soldier tasks (e.g., first aid, using chemical protective gear), individual weapons qualification, and preventative maintenance checks on their equipment.
- *Collective training event.* An exercise that focused on selected elements of the unit's Mission Essential Task List (normally tasks that the unit commander had designated as "trained" or "needing practice").

SOURCES OF INFORMATION

Because the ORE program was so new, we were not able to conduct a full assessment of it during 1992. However, we were able to obtain survey data from leaders of a small set of units that participated. Below we tabulate those results, from 46 key reserve component leaders in 32 units that received an ORE.⁴ We also used other sources, including visits to units, interviews with unit leaders and soldiers, and After Action Reviews from the corps, CONUSAs, ARNG,

⁴The leaders were company commanders and first sergeants of company-sized units. The 46 respondents included 27 from combat service support units and 19 from maneuver or combat support units.

and USAR. The impressions gained from these sources were generally quite consistent with the survey results.

EVALUATIONS: COMPLIANCE PHASE

The compliance phase of the ORE was generally well received. The ORE teams conducted thorough inspections, and the units were generally eager to learn from the results. As Table A.1 shows, in the survey 80 percent of unit leaders indicated that the compliance phase helped identify and fix problems. Among specific areas, the ORE was rated best at identifying personnel readiness problems, followed by supply, maintenance, and equipment readiness. All of these were problem areas identified during the ODS mobilization.

Table A.2 shows that large majorities of respondents recommended including the four major parts of the compliance phase in any future OREs. The fact that a significant number of the leaders believed that the key elements of the ORE were important and should be continued reinforces the conclusion that the compliance phase was useful and well received.

However, many RC leaders complained that the ORE compliance phase duplicated functions of other inspections. Unit personnel frequently urged that the other inspections be eliminated, and their requests were supported by the After Action Reviews from the various higher-level commands. A great number of inspections already ex-

Table A.1
Ratings of Compliance Phase Effectiveness

Item Rated	Percent Indicating ORE Was Helpful ^a
Overall compliance phase	80
Specific areas	
Personnel readiness	54
Unit supply and maintenance	43
Equipment readiness	39
Management of battle-focused training	35

^aBased on responses from 46 company commanders and first sergeants.

Table A.2
Importance of Including Compliance Phase Elements in Future OREs

Compliance Phase Element	Importance of Element (percent of respondents) ^a	
	Extremely or Very Important	Somewhat or Not Very Important
Mobilization preparation	87	13
Maintenance readiness	84	16
Personnel readiness	80	20
Review of training management	74	26

^aBase number of cases: 46.

isted. For example, an RC unit may be inspected by a TAG or MUSARC, CONUSA, Inspector General, or an affiliated AC unit (particularly in the case of round-out or round-up brigades). The unit is also subject to special activities such as mobilization exercises and Command Logistics Equipment Readiness Team visits. In fact, some leaders cited a tendency for the unit's chain of command to conduct assistance visits or pre-inspections to help prepare the unit for the ORE. The RC leaders did not suggest eliminating the ORE, but they did strongly recommend combining other requirements into the ORE and accomplishing them on the same weekend.

EVALUATIONS: TRAINING PHASE

Participant Assessments

Overall the training phase also received a positive reaction from participants. Table A.3 summarizes the survey respondents' opinions; three-fourths of them attributed a positive readiness effect to the ORE. Similarly, when asked if the ORE training phase was "worth the time and effort," 69 percent of the respondents agreed.

However, there was a tinge of criticism in these results; note that 26 percent of the leaders asserted that the ORE training phase had no effect or even a negative effect. We picked up this latter view particu-

Table A.3
**Impact of ORE Training Phase on Overall
 Unit Readiness**

Rating of ORE Effect on Readiness	Percent of Respondents ^a
Positive	74
No effect	15
Negative	11

^aBase number of cases: 46.

larly in visits to some maneuver and combat support (CS) units that were engaged in intensive preparations for AT and were inclined to view the ORE training events as intrusions into their tight training schedule.

In fact a few measures in the survey indicated more negative opinions among maneuver and CS units, compared with their counterparts in combat service support (CSS) units. For example, unit leaders were asked to compare the ORE training phase with external evaluations or Army Training and Evaluation Program (ARTEP) exercises. As line 1 of Table A.4 shows, 73 percent of CSS leaders felt that the ORE training phase represented an improvement over past ARTEPs that they had experienced. However, among leaders of maneuver and CS units, only 37 percent agreed. Similarly, line 2 reports assessments of the training contribution made by the exercise—whether it added new training opportunities or was redundant

Table A.4
Respondents' Evaluations of ORE Training Phase

Item	Percent Responding Affirmatively ^a	
	Maneuver and Combat Support	Combat Service Support
Was the ORE training better than an external ARTEP?	37	73
Did the ORE training phase add new training opportunities?	18	77

^aBase number of cases: Maneuver and CS, 19; CSS, 27.

with other activities. The CSS leaders saw added value in the training phase, while most maneuver and CS leaders did not.⁵

Recall that the maneuver units and most of the CS units received intensive AC support and lane training during Bold Shift. For them the ORE training event may not have seemed very different from the training they were already receiving. Many of the CSS units, however, did not get a high level of training support in 1992, so the ORE training event was probably significantly better than anything they normally experienced.

In addition, some maneuver unit leaders told us that they had convinced the ORE team to fall in on a planned IDT, especially when it was held at the unit's field training area. If a well-resourced event was already planned (such as a gunnery program or field exercise), the ORE team could thereby avoid extensive preparations that are time-consuming and resource-intensive. Moreover, using the existing IDT plan did not disrupt the unit's training schedule. In those cases, the ORE training phase could be considered redundant and would not be expected to exert a large effect on readiness. In contrast, the ORE team often provided CSS units with new events that were superior to the training already planned, and the CSS leaders evaluated it accordingly.

Improvements Suggested

Comments in the After Action Reviews raised several specific criticisms of the ORE training phase. First, some claimed that the training event detracted from or interfered with the unit's yearly training schedule, which culminates in AT. They argued that the ORE could disrupt this yearly training cycle; and if the ORE focused on different types of events, one IDT weekend needed to prepare for AT could be lost.

Other comments suggested that the tasks selected for the ORE training event were sometimes inappropriate or out of sequence for the unit's level of training (at least at that point in their yearly cycle). At

⁵Both of the above comparisons between maneuver/CS and CSS units were statistically significant at the .05 level, by a Chi-square test.

the least, many suggested that the Army needed to plan the date, location, and requirements for OREs far enough ahead to avoid training disruption.

A more basic critique centered on the desirability and feasibility of conducting a major training event during an IDT weekend. Some argued, instead, that the ORE training phase should be conducted during AT. Training support resources, according to this view, are not readily available at IDT weekends, and the effort required to pull them together diverts attention from other urgent needs. In fact, if another RC unit is directed to support the ORE event, the time lost could undercut the supporting unit's training. Furthermore, as we often heard, a two-day weekend is not long enough to evaluate the unit's training status on enough Mission Essential Task List (METL) tasks to gain an accurate picture of its readiness.

The idea of shifting the ORE training event to AT received considerable support from the RC unit leaders in the survey. Asked if the training phase should be conducted during IDT or AT, 89 percent of the maneuver and CS unit leaders and 56 percent of the CSS leaders selected AT.⁶ Similarly, over 75 percent of the After Action Reviews from TAGs and MUSARCs suggested moving the ORE to AT.

This debate about scheduling needs to be resolved, because it mirrors a deeper ambiguity about the goals of the training phase. Our view is that the primary purpose of the ORE training phase should be to encourage year-round sustainment of readiness and to assess that level of sustainment, at least for a small set of critical METL and METL-supporting tasks. If that is the goal, then the training phase should be conducted during IDT. A contrasting view is that the goal is to provide the chain of command and unit commander with a comprehensive assessment of the unit's status on its METL tasks. We argue that such a goal can only be attained during AT, when numerous AC evaluators can be available and a much larger set of tasks can be assessed; and, in fact, the Army already has a mechanism in place (the TAM) to provide such a global assessment.

⁶This difference may reflect the relative feasibility of conducting a major training event during an IDT weekend. Setting up such an event requires extensive time and resources for maneuver units, less so for CS units, and still less for CSS units.

Conclusions and Recommendations

Overall the ORE received a positive reaction from both AC and RC participants. As Table A.5 shows, over two-thirds of the RC leaders in the survey said that, as a result of the ORE, they were better able to understand readiness, to plan and manage more focused training, and to improve equipment readiness. Similarly, when asked if the ORE had affected the unit readiness assessment by the battalion or company commanders, 60 percent replied affirmatively. In a larger sense, both the survey results and our conversations with leaders suggested that the ORE achieved its “motivational” purpose—focusing units’ attention on readiness.

As discussed above, the compliance phase was generally considered useful. However, a recurring comment in After Action Reviews was the need for a more standardized, “battle focused” set of checklists and procedures. Our own review of the checklists and our examination of completed forms showed that a “yes-no” or “go/no-go” format predominated, with few other comments or data provided in many cases. This format prevented quantification of readiness and did not throw much light on reasons for shortfalls. Thus we argue that the forms and procedures should be redesigned to define standards more precisely, report quantitative data on performance, and identify underlying reasons for systematic shortfalls.⁷

Table A.5
Overall Effect of OREs

Overall, as a result of the ORE, do you feel you are better able to:	Percent Responding “Yes” ^a
Understand the readiness of the unit?	85
Plan and manage more focused training?	74
Improve equipment readiness?	67

^aBase number of cases: 46.

⁷In the pilot year, some of the measures were not specific enough to permit direct cross-checks of the Unit Status Report (in areas such as personnel deployability, availability of senior grade leaders, equipment on hand, and equipment serviceability). Only 22 percent of RC leaders in the survey reported that the ORE helped improve the accuracy of their USR. Substantial revisions would be necessary to obtain comparable data with the USR. Even then, the results would be directly comparable only for those companies that file USRs; this excludes maneuver units, which normally file USRs only at battalion level.

With respect to the training phase, the CSS units were quite positive; many of them indicated that they had been given new training opportunities. However, the maneuver and CS companies were somewhat less positive, possibly reflecting the extensive support they were already receiving for their training; thus they did not see the ORE training event as providing that much new. In fact, they tended to feel that it sidetracked them from their goal of preparing for AT, and many argued that the ORE training phase should be conducted during AT. The Army needs to address this issue by clarifying the primary goal of the training phase.

In addition, the impact of the ORE could be enhanced by more intensive follow-up after its completion. As noted in FORSCOM's original guidance, the ORE results could be used to identify resourcing shortfalls and systemic problems requiring intervention from outside the unit. A post-ORE follow-up could help achieve two goals: to verify that company-level problems have been corrected, and to identify and help resolve problems that are outside the company's purview. However, we found no mechanisms in place that could take full advantage of this opportunity and develop solutions to systemic resource, policy, or program problems.

Finally, it is important to eliminate the plethora of overlapping inspections. RC unit commanders, especially at the company level, have more responsibilities and spend far more time on administrative matters than their AC counterparts. AC commanders, for example, have a higher headquarters and post personnel and medical offices to handle much administrative work. In part because of the additional administrative burden, the RC commander also has more people concerned about his performance, and those people conduct periodic inspections or assistance visits. We observed adverse effects of this duplication in several units, and it was the subject of numerous comments in After Action Reviews from the RC chain of command.

**SURVEY RESPONDENTS' RECOMMENDATIONS FOR
IMPROVEMENTS**

POTENTIAL IMPROVEMENTS IN ANNUAL TRAINING

In the survey, leaders and unit members were asked to rank a number of options to improve AT by stating their first, second, and third choices from a list of options. Tables B.1 and B.2 show the results, ranked in order of the respondents' first-choice selections.

Better AT attendance was the improvement ranked highest by the leaders. Unit members ranked better AT attendance within their top five choices. This view of the RC leaders and members is consistent with our finding that poor AT attendance was a major impediment to meeting Bold Shift pre-mobilization training goals.

More equipment available for training ranked second among the leaders and first among the members. This improvement was selected by 25 percent of the leaders and 40 percent of the members as their first, second, or third choice. These results are consistent with another survey question that asked respondents to rate equipment availability during AT 1992. In response to that question, 21 percent of the leaders and 45 percent of the members rated equipment availability as fair, poor, or very poor. Clearly, those who had equipment problems ranked those problems very high. During our visits to AT events in 1992, there was no discussion of TOE equipment shortages, but there were complaints about the availability of operationally ready equipment from the equipment maintenance sites upon arrival at AT and about the ability of the units to quickly fix equipment that malfunctioned during AT.

Table B.1
Improving Annual Training: Ratings by Unit Leaders

Improvements Proposed for AT	Percent Choosing Specified Improvement ^a		
	First Choice	Second Choice	Third Choice
More unit members attending AT with their unit	17	13	9
More equipment available for training	11	5	9
More opportunity for leaders to lead and control their unit in the field	10	12	10
Increased time on ranges and maneuver areas	9	12	7
More time spent in squad and section drills and training	9	15	10
More time for individual skill training	9	9	10
More time at AT	8	5	6
Better planning and preparation for AT	8	6	9
More trainers to organize lanes and provide feedback	4	7	6
More effective use of training time	4	5	6
More Active Component trainers at AT	2	4	4
Better coordination during training	1	6	11

^aBase number of cases: 608.

More opportunity for leaders to lead and control their unit in the field was ranked third by the leaders. Recall that, for most of the Bold Shift units, AT in 1992 focused on echelons at platoon and below; therefore, the role of the company commander during AT was somewhat unclear.

Increased time on ranges and maneuver areas was ranked next by leaders after more opportunity to lead. This result is consistent with our observations on gunnery results. The gunnery schedules for some units were somewhat ambitious in 1992. There was also a tendency to ignore the "crawl-walk-run" strategy because units were trying to qualify a large number of crews in a short time, with limited time for each unit on the gunnery ranges. Staggering the arrival of battalions to AT could help this problem but would lengthen the time AC support personnel would have to be present at AT.

Table B.2
Improving Annual Training: Ratings by Unit Members

Improvements Proposed for AT	Percent Choosing Specified Improvement ^a		
	First Choice	Second Choice	Third Choice
More equipment available for training	21	10	9
Better planning and preparation for AT	13	12	8
More time for individual skill training	11	12	8
More unit members attending AT with their unit	9	7	7
Better coordination during training	8	12	12
Increased time on ranges and maneuver areas	7	7	7
More time spent in squad and section drills and training	7	9	7
More effective use of training time	7	8	7
More opportunity for leaders to lead and control their unit in the field	6	7	9
More time at AT	4	4	13
More Active Component trainers at AT	2	4	5
More trainers to organize lanes and provide feedback	2	5	4

^aBase number of cases: 6,385.

Better planning and preparation for AT and *better coordination during training* ranked high on the members' list. This result was driven primarily by members with no leadership position; junior leaders did not rank these items as high. During our visits to AT, we did observe down-time for soldiers in some units as they waited their turn to execute a lane or gunnery table. Many leaders were not prepared with "hip pocket" training plans to take advantage of these slack periods.

More time for individual skill training also ranked high as an improvement option among members and some leaders. This indicates that many feel they have not mastered the individual skills necessary for successful collective training. Individual skill training is a primary goal of training conducted during IDT weekends, and, as described below, this option was ranked high among options to improve IDT. There may be time available at AT that should be utilized for this purpose.

POTENTIAL IMPROVEMENTS IN IDT

Survey respondents were also asked to comment on a set of options for improving the effectiveness of IDT. Table B.3 displays the responses from unit members. The options are listed in order, based on the first-choice selections of the respondents. In terms of the members' first choice, the top five items are "more equipment available for training," "more time for individual skill training," "more effective use of training time," "better planning and preparation for drills," and "more time spent in squad and section drills and training." Note that three of the top choices for improving IDT ("more effective use of training time," "better planning and preparation for drills," and "better coordination during drills") reflect the members'

Table B.3
Improving Training at IDT: Ratings by Unit Members

Improvements Proposed for IDT	Percent Choosing Specified Improvement ^a		
	First Choice	Second Choice	Third Choice
More equipment available for training	26	8	8
More time for individual skill training	14	13	8
More effective use of training time	12	12	11
Better planning and preparation for drills	10	14	12
More time spent in squad and section drills and training	7	11	8
Increased time on ranges and maneuver areas	7	7	6
Better coordination during drills	6	11	13
Greater number of unit members attending drills	5	6	6
More opportunity for leaders to tactically deploy with their unit	3	4	5
More trainers to organize lanes and provide feedback	2	4	4
More Active Component trainers at weekend drills	2	4	5
More weekend drills	2	3	4
More full-time support personnel	2	2	3
Longer drills	1	2	5
More ADT for command/staff and leader training	0	1	1

^aBase number of cases: 7,738.

perceived need for better planning and more effective execution of weekend training, rather than a need for more resources to work with.

The responses from leaders, shown in Table B.4, included four of the same items in the top five but differed in that the leaders included the need for more full-time support. Among leaders, better planning and preparation for drills fell to sixth place. The same items remain as top choices for other categories of respondents. The top five or six vary only slightly based on the type of unit or level of leadership position held. Not surprisingly, maneuver units identified the need for "increased time on ranges and maneuver areas" as a top choice. Battalion and brigade staffs saw a greater benefit in "more ADT for command/staff and leader training." Commanders and first sergeants at all levels identified "full-time support" as a top choice.

Table B.4
Improving Training at IDT: Ratings by Unit Leaders

Improvements Proposed for IDT	Percent Choosing Specified Improvement ^a		
	First Choice	Second Choice	Third Choice
More equipment available for training	13	5	4
More full-time support personnel	12	8	8
More time for individual skill training	11	10	9
More time spent in squad and section drills and training	10	14	8
More effective use of training time	10	9	9
Better planning and preparation for drills	8	11	12
Increased time on ranges and maneuver areas	7	8	6
Greater number of unit members attending drills	5	6	5
More ADT for command/staff and leader training	4	7	10
More opportunity for leaders to tactically deploy with their unit	4	5	5
More trainers to organize lanes and provide feedback	3	5	4
More weekend drills	3	2	2
Better coordination during drills	3	4	7
More Active Component trainers at weekend drills	2	5	5
Longer drills	2	3	1

^aBase number of cases: 637.

Appendix C

RESOURCES FOR SELECTED BOLD SHIFT PROGRAM ELEMENTS

The active-to-reserve relationships under Bold Shift differed from previous arrangements. The active unit was responsible for developing plans in conjunction with the reserve unit, and for actually conducting training events at AT rather than just observing and assessing the RC unit's conduct of its own training. This strategy was manpower- and leader-intensive compared with previous training methods and placed a new burden on the AC units. Some AC leaders expressed concern about the additional funds and manpower that would be required for successful implementation. In addition, the Army devoted resources to new programs such as the Operational Readiness Evaluation, for which new structures were created under the CONUSAs.

An additional concern was the impact on AC unit readiness. AC support of IDT weekends frequently involved a travel day each way as well as the actual time spent in support, and the preparation and execution of AT could be time-consuming. Some argued that the amount of time spent could adversely impact the training programs of active units and overextend their leaders.

This appendix describes the extent of the support provided for major Bold Shift initiatives and summarizes basic data on their resource requirements and costs. The data were reported to Forces Command and RAND at the end of FY 1992 to assist the Army in planning future RC training and preparing for possible expansion of the Bold Shift program to other units.

RESOURCES FOR AC SUPPORT TO ANNUAL TRAINING

Table C.1 shows estimated dollar costs for AC units to support AT.¹ The dollar costs of providing AC support to AT were not great. The costs of supporting the round-out and round-up brigades depended on the distance from the supported brigade to the supporting division. If the brigade was in the same state, AT was held at the division's home fort or training area (or very near); in these cases the dollar cost for the AC to provide AT support averaged \$107,000 per brigade. In cases where the brigade was in a different state and the supporting division needed to travel, the dollar costs were considerably more, averaging \$665,000 per brigade. The costs to provide AC trainers and observer-controllers to the support units averaged \$11,000 per company, but it is clear from the data that the costs per unit varied greatly.

Table C.2 shows the AC man-day cost of supporting AT. These man-days reflect the time the AC unit spent in travel; coordination; preparing, setting up, and testing AT lanes; and executing the training at AT.

There was a great deal of variability in the number of man-days reported by the AC units. For example, one brigade reported receiving 5,000 man-days of support; it had only a separate AC brigade as a supporting unit and had no AC support unit assigned permanently. Another brigade reported receiving 47,000 man-days of support; the AC unit supporting this brigade indicated that they had brought far

Table C.1
Dollar Cost of AC Support to Annual Training

Type of Unit	Average (\$1000s)	Range (\$1000s)
Brigades in the same state as AC support	107	90 to 138
Brigades in different state as AC support	665	470 to 1066
Nondivisional support units ^a	11	1 to 47

^aSupport units at Echelons Above Division and Echelons Above Corps.

¹Based on resource reports provided to FORSCOM and RAND during FY 1992.

Table C.2
Man-Days for AC Support to Annual Training

Type of Unit	Average (man-days)	Range (man-days)
Brigades	22,000	5,000 to 47,000
Support units	291	6 to 1,960

more people to AT than needed. The AC support provided for the remaining four brigades ranged from 15,000 to 25,000 man-days.

The levels of AC support provided to the nondivisional units also varied a great deal. In 1992 many of the support units were not identified as pilot units until well into the training year. Training schedules and plans were firmly established and in many cases the relationship between the AC and the RC support units did not get an opportunity to mature. As a result, the AC support to the RC support units was very uneven; it ranged from minimum support for the AT evaluation up to complete RTC lane training.

A particular concern of AC leaders was the amount of AC training time forgone to support AT. We discussed these issues at length with senior AC leadership (brigade commanders, assistant division commanders, and division commanding generals) at the AT events we visited. These leaders were, for the most part, consistent in making a number of points:

- This was a mission to be carried out like any other.
- For the round-out divisions, this training was extremely important because during wartime the division expected to be deployed with its RC brigade.
- The support was leader-intensive, so the division continued only low-level training of its soldiers who were not involved with AT support.
- The RTC was useful training for AC leadership. It forced leaders to examine the manuals, learn the standards, and improve on techniques for After Action Reviews.

- The impact on AC unit training depended heavily on where the AT period fell relative to the AC unit's training schedule and its next National Training Center (NTC) rotation date.
- Each AC unit should be required to support only one like-type RC unit. If more RC units are assigned to an AC unit, either the AC unit's training would be degraded or some RC units would have to receive less support.

Only one AC brigade felt that support to the RC in 1992 had a significant training impact. In this case, one of the division's two brigades was in the process of moving to the division's new location, and the remaining brigade was in the midst of an NTC preparation phase when the RC AT occurred.

RESOURCES FOR AC SUPPORT TO IDT

The major resource elements for supporting IDT, as reported by AC sponsor units, were Operations and Maintenance (O&M) costs for such items as travel and transportation and the man-days AC soldiers spent in providing assistance to the RC units.

Two of the divisions supporting the training of round-out/round-up (RO/RU) brigades reported no costs for assisting at IDT. (All six reported costs to support AT for the brigades.) The costs for the others varied widely, as shown in Table C.3. In one case the division pro-

Table C.3
AC Resources for Supporting IDT

Type of Unit	OMAR ^a (\$000)	OMA ^b (\$000)	Total O&M (\$000)	Man-Days
RO/RU brigades				
A	262	0	262	4,325
B	373	0	373	747
C	99	0	99	579
D	25	0	25	
Total, 4 brigades	759	0	759	5,651
54 separate companies	190	145	335	4,504

^aOperations and Maintenance—Army Reserve.

^bOperations and Maintenance—Army.

vided a great deal of assistance to the brigade for IDT training; in other cases little cost was incurred. Part of the difference is explained by geography. One division is located in the same state with the brigade and can provide support to almost any weekend drill where assistance is warranted. Another division is located halfway across the country from the brigade it supported. While the latter division could provide extensive assistance at AT, it was not practical to provide trainers and other assistance for weekend drills.

Two divisions reported detailed data on mobile training team support to their respective round-out brigade's IDT. We note three categories of assistance. The first category represents modest planning efforts (for example, one or two persons traveling to the unit to help plan future training or to coordinate support). These visits would not usually involve the conduct of training. The second category represents assistance by a team of individuals to actually conduct a training event. This might involve 3 to 5 persons to conduct individual or crew specialty training, or it might involve 10 or 20 persons to help conduct a more extensive event. Finally, there are events requiring large numbers of personnel, up to one hundred in some cases (for example, to support crew gunnery on a range or some other major training exercise). These persons were manning the range and providing range support as well as training assistance so that the RC unit could simply "roll on and roll off" the range, thus focusing RC time and attention on gunnery. This latter category could also include support for lane or maneuver training, where the active unit provides the opposing force, observer-controllers, and other training assistance. Table C.4 summarizes data on the frequency of these types of assistance.

Most of the support to IDT was by teams of 1 to 5 persons, according to the data reported by the supporting division. For one of the divi-

Table C.4
AC Support for Round-Out Brigade IDT

Brigade	Number of AC Visits, by Size of Assistance Team		
	1 or 2	3 to 9	10 or more
A	37	47	18
B	14	32	28

sions, however, 110 persons were provided on three occasions to support crew gunnery. This illustrates the range of support that can be provided (where units have a supporting relationship and where facilities and geography make it possible) to facilitate more effective IDT.

Most leaders were less concerned with the dollar costs of supporting IDT than with the possible effect on the readiness of the AC division. As shown above, IDT support can involve a large number of people, and those people are not available to train with their AC unit. Even where the number is small, in many cases the personnel needed are the AC leaders, particularly NCOs and company- and field-grade officers. If they spend the week training with their unit and their weekends helping RC units, they may find themselves stretched very thin. While some voiced this concern, none of the evidence we saw indicated that it was a significant problem in 1992. In the future, however, it could become a problem, especially if many more RC units need support.

RESOURCES FOR THE OPERATIONAL READINESS EVALUATION

Unlike the other elements of Bold Shift, the ORE was a completely new program that required establishing a new structure with personnel devoted to it. In 1992 each ORE was conducted by a CONUSA team with an authorized strength of 13 personnel.² Each team could evaluate up to 21 units per year. The number of teams varied between CONUSAs based on the unit density in their geographic area. Additionally, each CONUSA was authorized a colonel, master sergeant, and secretary to head the ORE element. Time not spent actually conducting evaluations was spent in planning and preparation. ORE teams required augmentation with subject matter experts to assist in the evaluation of the training phase or the maintenance of specialized equipment. This augmentation come from corps, readiness groups, or RC units. The number of augmentees for each ORE varied from none to 6. Each augmentee spent from 4 to 8 days

²Draft ORE regulation (Forces Command, 1992b, p. C-1).

on this duty, depending on the type of unit and the amount of preparation required.

In addition to personnel, each CONUSA had operational costs connected with OREs. The expenditures included (1) direct costs of each ORE, including transportation and per diem for the team, (2) indirect recurring costs, including civilian salaries, equipment lease and maintenance, and supplies, and (3) in 1992, one-time procurement costs which primarily covered office equipment purchases. Table C.5 summarizes the FY 1992 costs for all four CONUSAs.³

The RC chain of command was tasked to provide resources to support units selected for an ORE. Included were personnel, in addition to the ORE evaluators, to set up and support the training event (for example, an opposing force for maneuver training). Some personnel were also used to escort visitors, depending on the extent of the training phase and command interest. Normally the TAG or MUSARC supported such requirements by tasking other units. The RC higher headquarters also provided mobile assistance teams to help the unit prepare for the ORE.

Table C.6 summarizes costs reported for 42 OREs. It distinguishes two cost categories: additional man-day costs for M-day soldiers and other costs, including travel and all classes of supply. The median cost, \$6,000, is given here because of the high variability across units. The range was from zero to \$139,000, with an average cost of \$19,000 (driven by a few cases at the high end).

Table C.5
FY 1992 CONUSA Costs for 59 OREs

Cost Item	Cost (\$1000)
Direct ORE cost	497
Indirect recurring cost	131
One-time procurement cost	841
Total cost	1,469
Average direct and indirect cost per ORE	10.6

³Based on resource reports provided by CONUSAs.

Table C.6**FY 1992 Costs of RC Units' Higher Headquarters for 42 OREs**

Cost Item	Higher HQ Costs (\$1000)	RC Unit Costs (\$1000)
Manpower	507	61
Other	302	82
Total cost	809	143
Median cost per ORE	6	2

The RC unit receiving the ORE also incurred some additional costs, primarily for preparation but also for vehicles and supplies for the ORE team and higher headquarters personnel. Table C.7 shows these costs for the 22 units that provided cost information. The median cost was \$2,000, although again there was high variability; costs ranged from zero to \$34,000, with an average of \$7,000.

Table C.7**RC Unit Costs for OREs**

Cost Item	RC Unit Costs (\$1000)
Manpower	61
Other	82
Total cost	143
Median cost per ORE	2

THE BOLD SHIFT PROGRAM

Bold Shift aimed to enhance the readiness of RC units and to improve relationships between AC and RC leadership. The program was formally launched in late 1991 by the Chief of Staff of the Army and the Commanding General of U.S. Army Forces Command (CSA, 1991).

In disseminating information and guidance to units and the chain of command, the Army used the acronym "RESULTS" to describe seven areas of change, which are summarized below:¹

- Reorganization, Restructuring, and Realignment
- Emergency Deployment Readiness Exercise [later changed to Operational Readiness Evaluation (ORE)]
- Soldier Training
- Unit Training
- Leader Training
- Training Involvement of the Wartime Chain
- Support (Full-Time)

¹Much of this information is derived from messages and briefings from Forces Command (1991a, 1991d, 1992f) and from discussions with staff officers.

REORGANIZATION, RESTRUCTURING, AND REALIGNMENT

As the Army moved to reduce the active and reserve inventory, it also needed to restructure its units for force projection in a contingency era. To do this, it was necessary to select units that would be most needed early in future contingencies, while keeping the number to a reasonable size. Accordingly, the Army identified a Contingency Force Pool (CFP) of high-priority support units. The intent was to protect units in the pool from potential turbulence associated with the reduction in forces and any resulting restructuring and restationing of units. This pooling procedure was a significant change from earlier planning. Previously, separate units had been identified for each defined wartime theater; there was a goal of not allocating any RC unit to more than one theater in order to simplify the unit's planning and training requirements. Under the new plan, however, units could be drawn from the CFP to deploy to any theater. By reducing the number of units that needed to be ready to deploy quickly, the CFP reduced the total amount of resources required for these types of units, and it allowed limited resources to be focused on the highest-priority units.

OPERATIONAL READINESS EVALUATION

Originally called an Emergency Deployment Readiness Exercise, this initiative was later renamed Operational Readiness Evaluation. It was to provide a readiness assessment as well as a training exercise and an incentive to focus on readiness.² Under the ORE, teams from Continental U.S. Armies (CONUSAs) conducted visits and exercises to evaluate four areas: (1) personnel availability, (2) equipment availability, (3) serviceability of equipment, and (4) training readiness.

The ORE included two phases. First was a "compliance phase," a records and equipment inspection, normally conducted during the work week and involving full-time personnel and leaders from the unit. Second was a "training phase," frequently conducted during the following weekend IDT period. It normally included a physical fitness test, a test of individual soldier skills required for combat, and

²See Appendix A for more detail on the ORE.

a group exercise requiring the unit to perform elements of its wartime mission.

SOLDIER TRAINING

Soldier training initiatives were intended to improve personnel readiness, particularly the ability to quickly deploy the unit without extensive formal school training or addition of other personnel to the unit. Personnel readiness generally depends on possessing sufficient personnel who are duty MOS qualified and deployable (in terms of being medically, legally, and physically qualified to deploy to an overseas theater).

Forces Command and the Army issued guidance emphasizing the importance of achieving duty MOS qualification for all soldiers and directed that priority for MOS courses be given to the pilot units. To help ensure that such units would have sufficient numbers of personnel, the Army also authorized some units larger numbers of personnel than their wartime-required strength.

UNIT TRAINING

Before Bold Shift, many RC units were mandated to train large formations, even though they had little time to master more basic individual and lower-echelon tasks. The peacetime goal was proficiency at the "level organized." Bold Shift, however, encouraged units to concentrate on more achievable pre-mobilization goals, focusing on lower echelons. As explained in detail in Chapter Two, under the new strategy the pre-mobilization goals for RC units were to be: (1) for combat units, vehicle crews and squads qualified in gunnery and maneuver and platoons proficient in maneuver, (2) for CS and CSS units, companies proficient in critical tasks, (3) for all units, ability to perform basic sustainment and control functions in a tactical setting and commanders and staffs trained in essential skills to manage their unit.

The Reserve Training Concept (RTC) was announced as the method for reaching these goals. As described in Chapter Two the RTC trained small units in a training event called a "lane." The lane was normally set up and operated by a supporting AC unit, allowing the

RC unit to focus on learning its own task rather than managing training support. Trainee units aimed at achieving a specified standard of competence, rather than simply performing a prescribed number of tasks or adhering to a schedule. The RTC also followed the graduated procedure described as "crawl-walk-run," which emphasized performing preliminary individual and collective training events before moving on to the next step. Each event was closely monitored by AC observer-controllers who provided a detailed discussion and critique in an After Action Review.

A related aspect of the unit training plan was an attempt to refocus monthly drills (inactive duty training (IDT)). IDT periods were now to be reoriented along RTC lines and to focus on individual skills, gunnery, and lower-echelon collective tasks that would prepare a unit for reaching its AT goals. In some cases, mobile training teams from AC units visited RC units at home station and helped plan and support IDT training events.

LEADER TRAINING

ODS revealed shortfalls in leadership and training abilities among RC officers and NCOs, and showed that many had not received the formal professional education prescribed for their positions. Bold Shift therefore included efforts to make leader training an intrinsic component of AT and to emphasize the importance of professional education for officers and NCOs. It also arranged for many officers to attend a special version of the Tactical Commanders Development Course (for battalion and brigade leaders) and a newly developed Unit Leaders Battle Skills Course (for company leaders).

TRAINING INVOLVEMENT OF THE WARTIME CHAIN

RC units often face a peacetime chain of command that is different from the wartime organizations they will serve under if deployed. During the Cold War, the wartime "gaining" headquarters was often remote from the RC unit (sometimes stationed overseas) and did not routinely supervise or prescribe peacetime training. Bold Shift attempted to change these AC-RC command and training alignments, initially to ensure that a wartime headquarters was involved in planning RC training and identifying its key training tasks.

In some cases (e.g., the round-out brigades and their divisions) this alignment (both wartime command and peacetime training) was natural and worked well under Bold Shift. However, in other cases (e.g., separate support units), the RTC called for considerable peacetime training support that could only come from an active "like-type" unit whose organization and mission were similar to the RC unit but whose wartime and peacetime command alignment was different. Therefore the program evolved by emphasizing a close association between the RC pilot unit and its like-type sponsor unit in the AC.

SUPPORT (FULL-TIME)

RC units are authorized some personnel who are full-time soldiers or civilian employees. However, many observers questioned whether the available full-time personnel are sufficient to support unit functions (DAIG, 1991; Office of the Assistant Secretary of Defense, 1990; Brauner and Gotz, 1991). During Bold Shift, RC headquarters attempted to provide more full-time support for pilot units. In addition, the Army took steps to implement the congressionally mandated assignment of 1300 AC soldiers to the National Guard, assigning many of them to ORE evaluation teams and to units in the round-out and round-up brigades.

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